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ABSTRACT

The project was concerned with development and evaluation of an auto-instructional media package (six sound strips and a guidebock) intended to enable teachers to design an effective classroom environment, to manage learner behavior, and to sequence instructional materials. Four groups of preservice and inservice teachers (88 university education students, 55 teacher volunteers from regular/special urban school classes, 48 rural special education teachers, and a contrast group of 26 education students) took pretests and engaged in variations of learning, which included viewing prototype sequences, completing guidebook exercises, or using the completed filmstrip package. Pretest and posttest data revealed that exposure to the media package resulted in similar significant learning gains for both preservice and inservice teachers (urban and rural), that media package exposure enhanced implementation of desired teaching behaviors, and that teachers who owned their packages implemented more than those only exposed to the prototype. Appendixes comprising approximately two-thirds of the document included such materials as film scripts, programed exercises, pretest and posttest scoring criteria, implementation checklists, and observer training materials. (MC)

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STRUCTURING THE CLASSROOM FOR SUCCESS

FINAL REPORT

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STRUCTURING THE CLASSROOM FOR SUCCESS

Production and Evaluation of a Mediated Teacher Training Package

Grant Number: OEG 9-71-1360(615)
Bureau of Education for the Handicapped
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March 1, 1971 to December 31, 1972

Principal Investigator: Charles A. Watts

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ABSTRACT

This study was concerned with the development and evaluation of a media package designed to promote change in teacher behavior in the classroom. The package consisted of six sound filmstrips and a guidebook. Content components were: classroom environment; activity centers; behavior management; individualizing instruction. The guidebook, through exercises and examples, emphasized the interrelationship of these components in structuring an elementary classroom for effective learning. Competency objectives for content mastery and enabling objectives for implementation were specified. A pretest and posttest and a classroom implementation checklist were designed to assess the extent to which those objectives were met by product users.

Four groups of preservice and inservice teachers participated in the evaluation. Sample I was education students (N=88) attending universities in Southern California. Sample II consisted of fifty-five teacher volunteers from regular and special education classrooms in two urban school districts in Los Angeles County. Sample III consisted of forty-eight rural special education teachers from California and Mississippi. A Contrast Group of twenty-six education students took the pretest and posttest with a five day interval in order to determine score stability of the test and to provide an estimate of test-retest score gain.

During the first week of the semester, Sample I subjects took the pretest, viewed the prototype slide-tape sequences, completed the guidebook exercises and posttest. Sample II subjects completed these activities in three workshop sessions, after which they contracted for classroom implementation. There was no discussion during the instructional phase. Before, and three weeks after the workshops, trained observers collected checklist data in the teachers' classrooms. In Sample III the pre and posttest data was collected by district liaison persons and each teacher was supplied with a set of the instructional materials to use on his/her own. Trained observers visited the rural classrooms before and three weeks after teachers received the media package. Sample III participants used the completed filmstrip version of the product. Successful classroom implementation was defined in terms of 50 percent of the teachers performing at criterion on at least one of the six stated objectives.

Since random assignment to treatment groups was impossible, a pretest and posttest design with t tests was employed for test and implementation scores for both between and within group comparisons. Follow-up checklist data were compared informally with the criteria for each objective.

Analysis of the pretest and posttest data revealed that exposure to the media package developed in this study results in significant learning gains for both preservice and inservice teachers (both urban and rural). Inservice teachers brought more knowledge and information to the instructional sequence, but their terminal performance on the test was not significantly different from that of the preservice level subjects. The media package is equally effective in teaching concepts and techniques to preservice and inservice teachers.

The fact that there was a significant difference between the pre and post checklist scores indicates that exposure to the media package promotes implementation of the techniques of creating an effective learning environment, managing learner behavior, and individualizing instruction. By the end of the study, the criterion level for classroom implementation had been exceeded by both teacher samples. Those teachers who had their own copies of the media package, including the expanded guidebook, appeared to implement to a greater degree than those teachers who were only exposed to the prototype version of the product.

The evaluation has shown, therefore, that the auto-instructional media package is capable of effecting meaningful performance changes in both preservice and inservice teachers (urban and rural). Several suggestions were made for product use and for further research on the effectiveness of the instructional package.

SECTION I

INTRODUCTION

This project was concerned with the development and evaluation of an auto-instructional media package for teacher training. An attempt was made to create a media package which would enable teachers to learn and to implement the techniques of designing an effective classroom environment, managing learner behavior, and sequencing instructional materials.

To those interested in the new technology of education, the role of the teacher in the schools of the future is of immediate concern (Allen and Mackin, 1970; Heller, 1968; Kapfer, 1970; Lindvall and Bolvin, 1970; Lipson, 1970; Merrill, 1968; Pearce, 1968; Rosove, 1970).

While these writers use a variety of terms--"a mediator of the environment" (Pearce, 1968, p.14), "facilitator of the instructional process" (Lipson, 1970, p.9)--to describe the teacher's role, all are in unanimous agreement that the time-honored "teacher-taught" classroom model is no longer viable. Within the category of the new technology are "new kinds of lesson units which are not books, new kinds of techniques to assess student progress" (Gagne, 1968- p.8). Such software are seen as integral units in a system of individualized instruction--a technique which Lindvall and Bolvin (1970) identify as among the most promising now available for educational improvement. Individualized instruction has as its goal the development of the "self-directed learner" (Lindvall and Bolvin, 1970, p. 39). Such development is only possible, however, when the student is permitted to make choices about what and how he will learn (Kapfer, 1970). As Gagne (1968) argues, the technology is available as technique; however, "'if teachers do not change, there will be no educational change'" (Combs, 1969).

The current trends in instructional theory briefly indicated above are of particular relevance to special educators who, of necessity, have traditionally emphasized the uniqueness of each learner. Haring (1970) describes the impact of the new technology on special education curriculum:

> Influences upon curriculum have taken the form of (a) programs which individualize instruction; and (b) programs which require active responses from children.
>
> ...The behavioral view of the exceptional child has had two major effects on special education. One has been the realization that the effects of environmental modification can change some deviancies in development. (p.24)

"Environmental Academics," an academic experience for socially disadvantaged five year olds, developed at the University of South Florida (Dwyer and Elliget, 1970), is a specific example of the type of program which Haring mentions.

Successful application of new techniques in other than research and experimental settings will require that teachers be innovative, flexible, and trained in new competencies. Programs which coordinate existing strands of educational theory and practice into systematic models for classroom use must be designed for teacher inservice. Also as Allen and Mackin (1970) point out, "Almost any effort to effect lasting change in the classroom, however, involves the teacher education institution as well as the school system, and thus magnifies the size of the task" (p.65). Thus preservice level exposure to the new technology is also essential.

Teacher education at any level must be concerned with feasibility and cost effectiveness. In this regard, an instructional method now being explored with members of the medical profession is of interest. A sound filmstrip format has been found effective in permitting low-cost dissemination of new information to practitioners (Finn, 1966-present). It might well be that the sound filmstrip package would provide the basis for an effective program for instructing both perservice and inservice teachers in techniques which make classroom learning more efficient and enjoyable for children.

Statement of the Problem

A review of relevant literature indicates that there are at least four interrelated components to be considered in the design of an effective instructional experience for children. These components are:

1. Stimulus environment of the learner.

2. Activity centers in the classroom.

3. Application of behavior modification principles.

4. Selection and sequencing of instructional materials.

When the teacher structures the learning environment, the student learns to structure his own behavior within it. Structuring the classroom for success begins with the creation of an atmosphere which simulates the complexity and intensity of the outside world. The use of activity centers in the classroom provides the learner with opportunities for meaningful interaction with the environment, and allows the teacher to plan for individualized instruction. Managing the behavior of the learners is an essential component. Research indicates that the systematic use of reinforcement principles facilitates the development of desired behavioral outcomes.

The development of systems models in education has indicated the need for evaluation and quality control. In order to design an instructional system, the teacher must be competent in analyzing and ordering learning tasks and in selecting appropriate teaching materials.

The aspects of educational technology presented above are not entirely new in education, yet in countless classrooms the textbook is the sole medium of instruction and innovation stops at the classroom door--Why? One reason is that information concerning the physical structure of the classroom, behavior management, and instructional systems design reaches the teacher, if at all, in textbook form. Secondly, the information is presented as isolated concepts rather than as interrelated components of an effective learning environment. As Merrill (1968) points out, "Many teacher preparation classes are referred to as foundation courses. There has often been little or not any effort to specify, with any degree of precision, the behavior which the teacher is expected to perform" (p.10). It is conceivable that actual change in teacher behavior can be effected at the preservice level "where prospective teachers have not yet been enveloped by a traditional routine" (Allen and Mackin, 1970, p.66).

Inservice programs are the primary means whereby teachers can actively improve their skills and update their knowledge. Many teachers, however, are situated in remote areas of the country where inservice programs are not available and demonstration classrooms are non-existent. Many of these teachers do not have access to the more sophisticated types of audio-visual equipment.

At least two films (Hewett, 1965; Thompson, 1968) are noteworthy for their attempts to demonstrate integration of the four components being discussed here. There seem to be two main reasons why these presentations are not highly successful in changing teachers' behavior. First, their content is essentially a documentary outlining a program which worked for a particular group of children and teachers. Secondly, movies as a medium may convey to the viewer an overall impression of an instructional program and some insight into behavior dynamics. Movies do not provide enough detail for practical application by the individual teacher in a new setting, and are insensitive to the responses of the viewer. In other words, movies do not stand alone. If they are to be fully instructional, they must be used as part of a total inservice program.

There appears to be a need for an instructional sequence which will enable preservice teachers to achieve cognitive mastery of the techniques involved in creating an effective learning environment and managing the behavior of the learners within it. An efficient instructional package is also needed to allow inservice teachers to update their knowledge and increase their competency in the classroom.

Accordingly, the major purpose of this study is to change teacher behavior in the classroom through a planned instructional sequence. A sound filmstrip format with accompanying guidebook appears to be the most efficient mode for presentation of the instructional content. The filmstrip medium has several desirable features: (1) it permits a self-paced learning experience, (2) it requires a minimum amount of equipment and technical knowledge on the part of the user, and (3) on a cost effective basis it is more economical than personal consultation with teachers or "live" inservice programs. Finally, (4) it is simple to disseminate.

For the purpose of this study a media package consisting of six sound filmstrips and a programmed guidebook was developed. The audio-visual sequence demonstrated methods for arranging the total classroom learning environment. The guidebook expanded on these demonstrations and provided paper and pencil exercises designed to reinforce the ideas discussed.

A second purpose of the study is to compare terminal performance of inservice and preservice teacher groups after both groups have participated in the instructional sequence to determine whether there are differences between these two groups in amount of content mastered.

SECTION II

OBJECTIVES AND DESIGN OF THE EVALUATION STUDY

Objectives

In this project, a media package, consisting of six sound-filmstrip sequences and a guidebook, was developed. This instructional package was used with three groups; preservice, inservice urban teachers, and inservice rural teachers. For the preservice groups and the inservice urban groups, the material was presented in a face-to-face group format. For the inservice rural teachers, the presentation format was self-instructional. One pre and posttest was designed for use with all samples; a pre and post classroom implementation checklist was created for use with the inservice teacher groups. The study evaluated the media package in terms of its effectiveness in teaching concepts and methods related to the design and management of a decentralized classroom, and also its effectiveness in facilitating actual change in teacher behavior in the classroom. Pre and posttest scores were compared for all samples; pre and post implementation checklist scores were compared for the inservice teacher samples. Posttest scores of the inservice and preservice samples were compared to determine the relative effectiveness of the media package with these two groups. In all comparisons differences between pre and posttest means were determined by t tests; the accepted level of significance was .05. Criterion level on the implementation checklist was established at 50 percent. The following objectives were specified:

1. General Objective for Product Development.--To create a media package which will promote change in teacher behavior in the classroom.

Specific Objectives

1.1 To demonstrate in the media package the functional pattern of interrelated components of an effective learning environment.

1.2 To demonstrate a variety of techniques which when combined will produce a learning system reflecting the individuality of the teacher and the students.

1.3 To provide an auto-instructional sequence for teachers who lack training in newer education methods, and for students in teacher education programs.

2. General Objective for Product Evaluation: To design evaluation instruments to assess change in teacher behavior in the classroom and to measure cognitive mastery of the content presented in the media package.

Specific Objectives:

2.1 To determine whether the posttest performance of the inservice groups was an improvement over their pretest performance.

2.2 To determine whether the post implementation checklist scores were significantly different from the pre implementation checklist scores for the inservice groups.

2.3 To determine whether there was a significant difference between the performance of the urban inservice (face-to-face group format) and rural inservice (self-instructional) groups on the posttest and the post implementation checklist.

2.4 To determine whether the posttest performance of the preservice groups was an improvement over their pretest performance.

2.5 To determine whether there was a significant difference between the performance of the urban inservice group and the preservice groups on the posttest.

Design

The study was conducted in five stages (See Time Line, Appendix I); each stage involved several specific steps as outlined below:

1. Product Development

   1.1 Needs survey

   1.2 Development of slide-tape sequences

   1.3 Development of Programmed Exercises

   1.4 Field Test of slide-tape prototype

   1.5 Assembling Instructional Package--production of filmstrips and tapes and printing of final guidebook

2. Design of Evaluation Instruments

   2.1 Pre and Posttests

   2.2 Implementation Checklist

3. Application of Instructional Package with Preservice and Inservice Teacher Groups

3.1 Subjects:

Sample I, College students (California State University, Fullerton and San Diego State University);

Sample II, Inservice Urban Teachers (Hacienda-La Puente Unified School District and Compton Unified);

Sample III, Inservice Rural Teachers (California and Mississippi)

3.2 Collection of Evaluation Data: Sample I

3.3 Collection of Evaluation Data: Sample II

3.4 Collection of Evaluation Data: Sample III

4. Comparison Sample

4.1 Collection of Comparison Data (Preservice)

5. Analysis of Evaluation Data

5.1 Sample I, Sample II, Sample III Analysis

5.2 Sample I (sub-sample) contrasted with Comparison Sample

5.3 Sample II and Sample III Comparison

5.4 Sample I and Sample II Comparison

Method

1. Product Development

1.1 Needs Survey.--A two page needs survey questionnaire and a cover letter (Appendix II) were prepared and mailed to Directors of Special Education in 44 rural county education offices in the three state region (California, Arizona, Nevada) served by the Instructional Materials Center for Special Education, University of Southern California (IMCSE/USC). Any county or school district having more than five and less than thirty special education teachers was considered to be rural. These regions were identified in California from survey data obtained by IMCSE/USC in 1968. For Arizona and Nevada the information was supplied by the State Departments of Education. Eighteen districts were identified in Arizona; 22 in California, and two in Nevada. The purpose of the needs survey was to determine:

a. The usefulness of the proposed media package to special education teachers.

b. The type of play-back equipment most readily available to teachers in rural areas.

1.2 Development of the Slide-Tape Sequence.--A team consisting of two master teachers and a research consultant determined the content components to be included in the instructional package. A content outline was then developed for each of the five content areas planned; the decision was made to first develop a prototype model of the final media package in the form of slide-tape sequences. A sixth slide-tape sequence was planned as an overview or summary, and was thus written after the first five were prepared. Using the content outline as a guide, draft scripts were written. Suggestions for appropriate visuals (photography and art work) were listed. At this time a photographer replaced one of the master teachers on the team and a research associate was added. The scripts were then edited and the list of visuals was modified accordingly. A three month time period was required to produce a frame-by-frame prototype script for each of the five slide-tape sequences.

Next, the suggestions for visuals were printed on 3" x 5" file cards, color coded and numbered according to their place in the total sequence of slides. Visits were then made to several schools in Southern California, providing programs for special and regular elementary level students, to identify suitable model classrooms to photograph. Permission to photograph in each of the schools was obtained by IMCSE/USC. The file cards describing the visuals were then grouped according to the location where the pictures would be taken. On location photography required from one to three visits to each school district. Photographing of instructional materials was accomplished at IMCSE/USC. The eight school locations were: Cajon Valley Elementary School District, Escondido City Elementary School District; Fountain Valley Elementary School District; Los Angeles Unified School District; Los Angeles County School District, Redlands Unified School District: Visalia Unified School District; Diagnostic School for Neurologically Handicapped Children, Southern California.

Selection and sequencing of the final photographs took place concurrently with revisions and additions to the scripts. Photographic clearance was obtained for all students and teachers appearing in the pictures selected. Frames requiring titles or graphic representation were discussed with a commercial artist who then sketched rough copy for each frame. The team then suggested modifications in the art work before the final drawings were prepared. Photographs of the drawings were then inserted in the five slide sequences. At this stage in the development of the product, the script for the overview or summary slide sequence was written. The visuals selected to illustrate this script were largely duplicates of those appearing in the slide sequences already developed, and were thus intended to serve as review frames. All of the six slide sequences and scripts were then reviewed by a group of experts in the fields of special education and educational psychology. The scripts were again submitted to editing by the master teacher and the research consultant; minor revisions were made to the visual sequences.

A preliminary audio tape to accompany the slide show was prepared. The final scripts are presented in Appendix III.

1.3 Development of the Programmed Exercises.--Preparation of programmed exercises, containing one chapter for each slide-tape sequence was begun after the second revision to the scripts for the slide shows. A survey of some of the relevant literature was made in order to gain further ideas for the content of the guidebook and to generate a useful, though not exhaustive, bibliography of content sources for the guidebook user.

The exercises were designed to expand and clarify, through the use of additional examples, the ideas presented in each slide-tape sequence. The format permitted active responding to the programmed exercises on the part of the reader. Multiple choice, sentence completion, matching, and open-ended questions were included. An answer column was provided on the right hand side of each page of the text; the answer column could be folded back or covered by the reader.

Part one of the exercises was not programmed, but rather was designed to be read prior to viewing the first slide-tape show. It contained an introduction in the form of a brief statement of the rationale for the product and a listing of the content areas to be covered.

1.4 Field-Test of Product.--An article (Appendix IVa) was published in the Spring, 1971 issue of the IMCSE Communicator, a publication of IMCSE/USC, inviting volunteers to participate in the field-testing of the product. On June 8, 1971 a preview showing of the slide-tape package was held at IMCSE/USC for 25 preservice and inservice teacher volunteers from Los Angeles City and County Schools. Participants viewed each slide sequence, accompanied by the tape, and worked in pairs to complete the guidebook exercises following each slide sequence. The purpose of this preview showing was to ascertain the overall teacher reaction to the product and to solicit general comments and suggestions. A one page preview evaluation sheet (Appendix IVb) was prepared for this purpose. Each participant was provided with six such sheets, one for each segment of the product, and instructed to record his comments and suggestions following the presentation of each slide-tape sequence and corresponding guidebook exercise.

1.5 Assembling the Instructional Package.--After reviewing the comments made by the preview group, several minor revisions and some additions were made to the programmed exercises (Appendix V). The introductory chapter was expanded to include a list of ten objectives which stated in behavioral terms the competencies which the product user would be able to exhibit at the end of the instructional sequence, and a list of six objectives relating to classroom implementation. These objectives are shown in Figures 1 and 2.

Figure 1--Competency Objectives

1. To be able to draw a room plan for an elementary classroom including self-contained activity centers and an achievement core area.

2. To be able to identify the characteristics of an effective classroom learning environment including:

   a. An "open" or "decentralized" classroom plan.
   b. Conditions necessary for individualized instruction.
   c. Rationale for establishing activity centers.

3. To be able to list characteristics or purposes for, and content of, each of the following centers:

   a. Achievement Center
   b. Library Center
   c. Activity Games Center
   d. Arts and Crafts Center
   e. Science Center
   f. Audio-Visual Center

4. To be able to identify the defining characteristics of behavior patterns and reinforcers.

5. To be able to identify types of reinforcers including primary, tangible, token, social, intrinsic and "natural."

6. To be able to identify appropriate selection and use of reinforcers in the classroom learning situation.

7. To be able to identify the characteristics of a student-teacher contract and at least three ways that a contract may be modified.

8. To be able to identify the sequence of steps involved in planning individualized instruction.

9. To be able to identify statements which are written in behavioral terms.

10. To be able to identify functions of a daily schedule and give examples of tasks which can be included in a child's folder.

Figure 2--Enabling Objectives

1. To be able to create an "open" or "decentralized" classroom including the following characteristics:

   a. Furniture arranged for large group, small group, and individual uses.
   b. Achievement or task area distinct from other areas of room.
   c. Activity centers (two or more) established which provide students with direct access to materials.

2. To be able to increase the amount of stimulation and variety in the classroom environment as evidenced by the presence in the classroom of novel materials such as: easy chair, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc.

3. To be able to implement a behavior management system including:

   a. Teacher rewarding positive behaviors and/or appropriately consequating unacceptable behavior.

   b. Student Choice of Reward.

4. To be able to implement a contract sytem for student performance, including all of the following features:

   a. Teacher initiates verbal or written contracts with individual students and/or revises or changes stated contract.
   b. Teacher (or aide) checks off student's work upon completion.
   c. Rewards are given and are contingent upon task completion.

5. To be able to provide students with individualized schedules or daily programs which include:

   a. Group tasks or activities.
   b. Individual tasks or activities.
   c. Choice or free time.

6. To be able to increase the number of materials and equipment (Arts and Crafts, Audio-Visual, Games, Science, Library) in use in the classroom.

The instructional package was entitled "Structuring the Classroom for Success"; it consisted of the six slide-tape sequences and the programmed guidebook with a resource list. A brief outline of the content is presented below:

I. Overview

This slide sequence provided an overview or summary of the information presented in each of the other five. It specified the inter-relationships of the five components in structuring the classroom for successful learning.

II. Room Environment

This sequence presented the idea that a classroom atmosphere which simulates the auditory and visual intensity of our complex, colorful and changing society is most likely to capture the interest and enthusiasm of students. Suggestions for setting up an open or decentralized classroom were presented.

III. Creating Activity Centers

The purposes and contents of activity centers, focusing on various subject matter areas, were explored in the third slide sequence. Centers providing a variety of activities selected in accordance with the interest and ability level of the learners were shown. The centers included were: achievement, science, activity-games, arts and crafts, audio-visual, and library study. A list of suggested contents for activity centers was provided in the guidebook.

IV. Behavior Management Principles

The material presented in this sequence was based on the assumption that all behavior has a consequence. Since not all children find academic tasks rewarding, a classification of rewards ranging from trinkets and checkmarks to social approval and natural reinforcers, was discussed. Suggestions were made as to how the teacher could select appropriate rewards for the individual learner.

V. Behavior Management in the Classroom

Here the emphasis was on a success oriented classroom. Examples of how contracts might be initiated with students were discussed. Steps in managing group behavior were shown. The method of assigning "checkmarks" was presented as one way to help the child learn to delay reward.

VI. Individualized Instruction

This sequence was based on the premise that if learning is to be efficient and enjoyable, instruction must be individualized. Examples of how the teacher might prepare a daily sequence for each student were shown. The planning of a student's daily program and the careful selection and pacing of instructional materials was emphasized. The revised slide-tape sequences and the programmed exercises were used with Samples I and II. Following the analysis of the evaluation data

minor additions were made to the visual sequences to increase the variety of examples shown. The slides were then produced as six filmstrips. The scripts were recorded on cassette tapes and the programmed exercises were incorporated into a 100 page guidebook. (See completed product now available at all Regional SEIMC Centers.)

These components were assembled into a self-contained package with instructions for the user. This package was used with Sample III rural teachers.

2. Design of Evaluation Instruments

Phase Two of the study was concerned with designing objective instruments to be used in the evaluation of the effectiveness of the instructional package. A pre and posttest and an implementation checklist were created.

2.1 Pre and Posttest. The pre and posttest contained 25 items; nine of the items were open-ended, calling for examples of activities, materials, etc; 15 were multiple choice items, and one involved matching (see Appendix VI). Approximately five items were designed for each of the five content areas in the instructional sequence. Item one was designed to be completed before the rest of the test was seen by the subject; on this question the subject was given five minutes to sketch a simple room plan for an elementary level classroom. Instructions to subjects for the remainder of the test (items 2 through 25) read: "ATTEMPT EVERY ITEM. IN THE FOLLOWING MULTIPLE CHOICE QUESTIONS YOU MAY MARK ANY OR ALL OF THE ALTERNATIVES." The maximum time allowed for this portion of the test was 30 minutes. The total number of points possible on the test was 95; the scoring system and list of acceptable responses for each item appears in Appendix VII. Content validity of the test was assumed since all items were developed from the instructional material and were constructed to permit learners to demonstrate mastery of stated competency objectives.

2.2 Design of Implementation Checklist. The Implementation Checklist (Appendix VIII) was designed for use with inservice teacher subjects in evaluating changes in their classroom behavior following their experience with the instructional package. The checklist was constructed in such a way as to facilitate the collection of information to be used in determining whether the terminal objectives shown in Figure 3 had been met by the teachers.

Figure 3--Terminal Objectives

By three weeks after the instructional phase:

1. participants will have created an "open" or "decentralized" classroom including the following characteristics:

   a. a flexible furniture arrangement, i.e. furniture arranged for large, small groups and individual uses. (1a) *
   b. activitiy centers (2 or more) established which provide students with direct access to materials. (10 c)

2. participants will have increased the amount of stimulation and variety in the classroom environment as evidenced by the presence in the classroom of novel materials such as: easy chairs, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc. (2)

3. participants will have implemented an acceptable reward system. The system must include:

   a. teacher rewarding children for academic and social or management behaviors. (3 a,b,c,d)
   b. different rewards for individual children, and/or
   c. student choice of reward (3e,f)

4. participants will have implemented a contract system for student performance. To be considered acceptable, the system must include <u>all three</u> of the following features:

   a. teacher initiates verbal or written contracts with students and/or revises or changes stated contract.
   b. teacher (or aide) checks off student's work upon completion.
   c. Rewards are contingent on task completion and are given immediately following task completion (4a,b).

5. participants will have individualized instruction for students by:

   a, providing students with different level tasks in at least one subject area, or
   b. providing individualized student schedules which include:
   c. time for group tasks or activities, individual tasks and reward time. (5a,b,c)

6. participants will have increased the number of materials and equipment (Arts and Crafts, Audio-Visual, Games, Science, Library) in use in the classroom.

*Refer to sections of Implementation Checklist, Appendix VIII

Criteria for successful classroom implementation were as follows:

a) The mean scores obtained by the participants on the post implementation checklist will be significantly higher than the mean scores obtained on the pre-implementation checklist (significance level accepted $p < .05$).

b) 50% of participants will have reached criterion on at least 1 of the stated enabling objectives for classroom implementation by the time of the post observation. Evidence for successful implementation will be determined through scores on post implementation checklist.

A preliminary version of the checklist was field tested by the project team, assisted by one graduate student. The checklist was revised on the basis of the field test data; essentially, it was made more concise. At this time a set of operational definitions (Appendix IX) was written for use in training the classroom observers on the dimensions of the checklist.

Two graduate students in education were hired on an hourly basis to function as classroom observers for the project. These students were naive with respect to the nature of the study. They received two training sessions with an intervening practice session when they actually used the checklist in classrooms. All training sessions were conducted by the project staff; the first session consisted of discussing the meaning of each section of the checklist, as defined, with the two observers.

The observers were instructed not to discuss the checklist with the classroom teachers, and to be as unobtrusive as possible during their classroom visits. They were, however, told that in order to observe all of the materials present and in use in the room they were to move about the room. It was suggested that the observers spend approximately ten minutes of observation time completing the checklist items which related to the physical aspects of the classroom and approximately ten minutes focusing only on the dynamics of teacher-student interaction as described on the checklist. The observers were told that on checklist items where there was no observable data in the room, they were to ask the teacher and the children about the procedures used in the class. They could then score the item if the teacher or student was able to supply concrete evidence.

The observers worked as a team, using the checklist in two special education classrooms. Following this experience, the second training session was held for the observers. The observers asked questions and received clarification on the various dimensions of the checklist.

The two observers together then visited four special education classes and one regular class in Los Angeles Unified School District. The data from these observations were used to establish the interrater reliability of the instrument. The interrater reliability coefficient, based on the total checklist scores for the five classrooms sampled by the two observers was calculated to be .98. To compensate for the small number of cases used, the project team decided to gather additional reliability data during the first actual pre-workshop classroom observation phase of the study. This was

accomplished by randomly selecting five classrooms from the total of 36 which were visited by both observers. When these additional data were included in the analysis, the interrater reliability estimate fell to .68. This appeared to be a result of the fact that the data on the first five classrooms were gathered while both observers were present in the classroom at the same time; four of the other five classrooms were visited by the observers on different days, and in two instances one observer visited in the morning while the other saw the classroom in the afternoon. The checklist scoring criteria are found in Appendix X.

To expedite the training of 6 local observers employed for the collection of evaluation data in Sample III (rural teachers) a slide show based on the major variables on the implementation checklist was prepared. This slide training sequence along with printed materials (Appendix XI) was field tested with a group of beginning special education students at California State University, Fullerton. These students were trained to criterion (70%) on the observer training posttest. The trained students then observed several classrooms in order to insure transfer of observation skills to the real classroom environment. Observer reliability was determined by comparing the scores obtained by the trained students with those obtained by project team. Only those students who achieved an (86%) agreement with the rating by project team were considered to be reliable observers.

Four observers from targeted rural areas in California were identified and trained to criterion as described above. In addition, a State Consultant from Mississippi was trained to criterion.

3. Application of Instructional Package with Preservice and Inservice Teacher Groups

The prototype instructional package was used with three sub-samples of preservice level education students (Sample I) and two sub-samples of inservice teacher volunteers from both regular and special education programs (Sample II). The completed self-instructional package was used with a sample of rural teacher volunteers from special education programs (Sample III) in California and Mississippi.

3.1 Subjects. Sample I consisted of three sub-samples: sub-sample Ia, Ib, Ic;sub-sample Ia consisted of 35 students enrolled in Education 411: Psychological Foundations of Education at California State University, Fullerton during the first summer session, 1971.

Sub-sample Ib consisted of 32 students enrolled in Education 411: Psychological Foundations of Education at California State University, Fullerton during the Spring Semester 1972.

Sub-sample Ic consisted of 34 students enrolled in two special education classes--Emotionally Disturbed Children and Youth; Curriculum Methods for MR at San Diego State University during the Summer Session 1972.

The course in which students in sub-samples Ia and Ib were enrolled is a requirement for both the elementary and secondary teaching credentials in the State of California. The courses in which students in sub-sample Ic were enrolled are requirements for Special Education Credentials in California. The total number of subjects in sample I was 101.

Before participating in the study, each subject was required to complete a Student Information Sheet (Appendix XII). This procedure later permitted the stratification of Sample I along the dimensions of age; sex; classroom teaching experience; credential objective; number of education courses taken; number of psychology courses taken. Analyses of Sample I sub-group data were not within the scope of the present study, but will be reported in a forthcoming publication.

Sample II consisted of two sub-samples: sub-sample IIa and IIb. Sub-sample IIa consisted of 36 teachers from both regular and Special Education classrooms in the Hacienda La Puente Unified School District.

Subsample IIb consisted of 35 Special Education teachers from Compton Unified School District. Both school districts are located in Los Angeles County.

These school districts were selected to participate in the evaluation phase of the study on the basis of their response to the previously mentioned article which appeared in the IMCSE Communicator. Selection criteria involved the physical proximity of the district to IMCSE/USC, range of special education programs offered in the district and the willingness of the district personnel to cooperate with the intent of the study. The most important criterion was the extremely limited exposure of district teachers to the concepts and techniques presented in the instructional package. The decision on the last criterion was made by the project team through personal consultation and two visitations within each district.

For Sub-sample IIa, the Director of Special Education and the Assistant Superintendent made a random selection of ten schools in the district from a pool of all schools not involved in other inservice programs at the time of the study. A letter (Appendix XIII) was mailed to the ten school principals, thus identified, inviting them to participate in an inservice workshop sponsored by IMCSE/USC. The letter also requested that each principal distribute to all of the teachers in his school a copy of an enclosed letter inviting teachers to volunteer for the inservice workshop (Appendix XIV). The letter reached about 200 teachers, and was mailed during the first week of the fall semester, 1971. The principals were invited at the request of the school district and were not included in the analysis of Sub-sample IIa data.

All of the 36 teachers and six principals who returned the application form portion of their letter to IMCSE by September 27, 1971 were selected to participate in a workshop held in the Hacienda La Puente Unified School District office in October, 1971. The fact that the teachers were allowed to volunteer for the inservice workshop was justified since the potential use pattern of the final auto-instructional package will be on a volunteer basis.

For Sub-sample IIb, the district Coordinator of Special Education sent a copy of the teacher letter mentioned above to all Special Education teachers in the district. A list of teacher volunteers in the Compton district was submitted to the project team. These teachers participated in a workshop held in the Compton district in April, 1972.

At the first workshop session each participant was required to complete a Teacher Information Sheet (Appendix XVII).This procedure later permitted the stratification of Sample II along the dimension of age; sex; years of classroom teaching experience in regular or special education; type of class presently teaching; number of education courses taken beyond credential requirement; number of graduate psychology courses taken, and number of inservice programs attended in the last three years. Analyses of Sample II sub-group data were not within the scope of the present study, but will be reported in a forthcoming publication.

Sample III consisted of two sub-samples: sub-sample IIIa and sub-sample IIIb. Sub-sample IIIa consisted of 33 inservice teachers in six rural school districts in California. Rural districts were defined as those with less than 100,000 ADA. The rural school districts were selected on the basis of their response to the previously mentioned article published in the IMCSE Communicator. Selection criteria were essentially the same as for Sample II; in addition, a district liaison coordinator was asked to assume specific responsibilities for the collection of evaluation data (Appendix XV). In each selected district, the liaison person identified interested Special education teacher volunteers; these teachers received a letter (Appendix XVI) from the project team which restated the requirements for their participation in the study. Teachers who responded positively to the letter then consitituted rural Sub-sample IIIa. Descriptive data (age, sex, etc) for this sub-sample was obtained for the same purpose as described for Sample II.

The eighteen Sub-sample IIIb subjects were identified by Ms. Mildred Rowland, a State Consultant in Special Education in Mississippi who assumed the total responsibility for the collection of evaluation data in this Sub-sample. The decision to evaluate the instructional package with this group was made at the request of the Mississippi consultant and was not conducted with monies awarded to this project.

3.2 Collection of Evaluation Data: Sample I. Data collection in Sub-samples Ia, b college students, involved five consecutive sessions ranging from 30 minutes to one hour in length. All sessions were conducted by two members of the project team; the college instructor was present at all sessions, but was not involved with the data collection in any way. The college class was allowed to assume that the instructor was naive with respect to the project. This precaution was taken to insure that the students were not motivated to perform well on the pretest and posttest in order to please their instructor. The content of the five sessions is presented in Appendix XVIII.

During the time interval in which the instructional package was being presented, the class received no lectures or other content presentations from the college instructor. The students were, however, in possession of the course outline and textbook. It was believed that five sessions were appropriate and would allow sufficient time for maximum assimilation of the information presented via the instructional sequence.

In sub-sample Ic the procedures were essentially the same; however, time constraints made it necessary to condense the five presentation sessions into three. Instructions to subjects and content sequence were identical to those used with Sub-sample Ia,b.

3.3 Comparison Data Comparison data were obtained for an additional preservice sample; subjects were 26 students also enrolled in Education 411: Psychological Foundations of Education at California State University, Fullerton during the second summer session, 1971. These students completed the pretest on the first day of the second summer session, and four days later completed the posttest. Only the regular instruction planned by the college instructor intervened; these subjects did not view the instructional package.

3.3.1 Collection of Comparison Data. The following introduction was read to the students by the instructor who conducted both of the sessions:

"We are asking your cooperation in participating in a research study designed to evaluate the effectiveness of a pilot version of a media package developed by Instructional Materials Center for Special Education, University of Southern California.

The project is funded by U.S.O.E. and its purpose is to create an auto-instructional media package for teachers and students. Data have already been collected on the use of the media package in teaching students in Psychological Foundations of Education Your part in the study is to take the pretest today, and the post-test at a later date. You will not be exposed to the media package.

Your cooperation will enable us to determine more precisely the effectiveness of the media package. If you have any questions about the project, these can be answered after your part in the study has ended by contacting the Instructional Materials Center."

Students were then instructed to complete the Student Information sheet using code numbers for identication.

The procedures for the administration of the pre and posttests were identical to those used for Sub-sample Ia,b.

3.4 Collection of Evaluation Data: Sample II. Data collection in Sample II, teacher inservice groups, involved three steps: classroom visits prior to the workshops, the workshops, and follow-up classroom visits.

3.4.1 Classroom Visits The project staff made the necessary arrangements for the two trained observers to each visit one half of the total number of classrooms of the teacher volunteers in order to complete the Implementation Checklist. Length of the visits ranged from 30 to 45 minutes, and were completed one week prior to the workshops. As an additional check on inter-observer reliability, five classrooms were randomly selected to be visited by both observers. The observers assigned a code number to each checklist to insure teacher anonymity when checklists were scored by project staff.

3.4.2 Inservice Workshops The first inservice workshop was held at the Hacienda La Puente Unified School District office on October 19, 20, 21, 1971. The Compton workshop was held on April 4,11,18, 1972. The three after school sessions in each district varied in length from one to two hours. The length of the workshops was considered to be realistic in terms of demands on teacher time. All sessions were conducted entirely by members of the project staff. The description of three sessions is included in Appendix XIX.

3.4.3 Followup Classroom Visits Three weeks after the workshops, the two trained observers returned to visit the classrooms of the teachers remaining in the study to complete the Implementation Checklist.

3.5 Collection of Evaluation Data: Sample III. Following the selection of of rural districts (Sub-sample IIIa) and the identification of teacher volunteers, project staff visited each rural site for the purpose of inservicing the liaison coordinator on procedures for collection of pre/posttest data, and distribution of the instructional packages (filmstrips; tapes; guidebook). At this time the local observers were trained to criterion on the Implementation Checklist. Time and content sequence for the rural evaluation is included in Appendix XV.

Pre and posttest and Implementation Checklists for rural California (Sub-sample IIIa) were mailed by district liaison coordinator to the project staff for scoring and analysis. For the Mississippi Group (Sub-sample IIIb), all data were collected by the State Consultant and forwarded to project staff for scoring and analysis.

4. Analysis of Evaluation Data

4.1 Samples I, II and III. --After the pretests and posttests were scored, the total scores were tabulated for each sub-sample in Samples I, II, and III. Pretest and posttest means were calculated for each sample as well as for each of the sub-samples in the three samples.

Since it was not possible to assign the subjects to the treatment group, the design was one in which the pretest and the posttest was given in three different groups (preservice, inservice-urban, and inservice-rural); a comparison group (preservice) was also used. It was, therefore, determined that the t test for correlated samples was the appropriate statistic to use in comparing pre and posttest means for total groups, and for sub-samples. The t test for separate group variance was used when comparing the pre or posttest performance of one sample with that of another sample.

The mean scores obtained by subjects in Sample II and III on the Implementation Checklist prior to and after viewing the media package were compared by means of t tests. Follow-up Implementation Checklist data for sub-samples IIa, IIb were compared informally to the teacher contract sheets completed by each teacher participating in the workshops. The correlations between pretest and pre Implementation Checklist scores, and between post-test and post Implementation Checklist scores were also obtained.

4.2 Sub-sample Ia Contrasted with Comparison Sample.--The comparison group data were analyzed in the same manner as Sample I data. The pre-test mean for sub-sample Ia was compared, using a t test, with the pretest mean for the comparison sample. Sub-sample Ia data and comparison group data were further compared in such a way as to determine the combined effects of the passage of time and test experience on the posttest scores.

4.3 Comparison of Sample I and Sample II.--The pretest mean for Sample I was compared with the pretest mean for Sample II; the posttest mean for Sample I was compared to the posttest mean for Sample II. The statistic used was the t test for separate group variance.

4.4 Comparison of Sample II and Sample III.--The posttest mean for Sample II was compared with the posttest mean for sub-sample IIIa. The statistic used was the t test for separate group variance.

PART III

RESULTS AND DISCUSSION

Results

1. Needs Survey

Replies received from twenty-six of the forty-four rural county offices and school districts contacted in California, Arizona, Nevada indicated:

a. Eighty-five percent of school districts responding considered that the proposed product would be useful to them. Fifteen percent stated that it would depend on the content of the instructional package. None stated that it would not be useful.

b. Eighty-five percent indicated that their teachers had had some exposure to the concepts contained in the content outline for the package; this exposure was gained through inservice training, college and graduate level coursework, or outside reading. Only eight districts stated that 50 percent or more of their special education teachers were implementing the ideas in the classroom.

c. The record player, as expected, was reported to be the most universally available form of auditory playback equipment; however, twenty-four of the twenty-six districts also had cassette tape players. These findings suggest that cassette tape should be considered for the audio portion of the final instructional package.

2. Users' Evaluation of Instructional Package

The comments submitted by the preview, preservice, and inservice group participants on the open-ended evaluation sheets were largely positive and highly supportive. The preview group, who saw all six slide-tape sequences in one session, found the duplicate frames, intended as review, to be distracting. The preservice and inservice groups, who viewed the slide-tape sequences over a three to five day interval, did not emphasize the duplicate frames as an area of concern. Several subjects in the inservice group reacted most favorably to the structure of the inservice workshops. In general, the users' evaluation of the instructional package indicated three areas of needed improvement:

a. A greater variety of slides representing a broader range of classrooms, types of learners, and grade levels.

b. Expansion of guidebook sections to provide more detailed instructions for individualizing and sequencing instruction.

c. In depth discussion of how to handle disruptive classroom behavior.

3. Evaluation Data: Sample I

The final number of subjects in this sample was eighty-eight. Of the thirty-five students in Sub-sample Ia, two dropped the class, two did not attend all of the instructional sessions, and one did not take the posttest; the final number of subjects in this Sub-sample was thirty. Of the thirty-two students in Sub-sample Ib, four dropped the class and two did not attend all sessions; therefore, the final number of subjects in Sub-sample Ib was twenty-six. Of the thirty-four students in Sub-sample Ic, two students did not take the posttest; therefore, the final number of subjects in Sub-sample Ic was thirty-two. Table I presents the breakdown of Sample I by age, sex, teaching experience, credential objective, education and psychology courses taken.

Table I shows that Sub-samples Ia and Ib were remarkably similar with regard to descriptive characteristics, although the majority of the Ib group were seeking a secondary teaching credential. Sub-sample Ic was quite different from the other Sub-samples in that many students had previous classroom teaching experience and the majority were working towards a Special Education (as opposed to regular) teaching credential. For these reasons, data were analyzed separately for each Sub-sample.

The pretest and posttest means, standard deviations, and range of scores for Sample I and the three sub-samples of Sample I appear in Table 2. A casual inspection of the range of pre and posttest scores shown in Table 2 suggests that the test was not too easy since no student obtained the maximum score of 95. No pretest score was lower than 24. Test-retest reliability estimate for Sub-sample Ia was .66.

Table 3 presents the pre and posttest comparisons for the three Sample I Sub-samples and for the total Sample I. The t values presented in the table indicated that the total group and all of the Sub-samples in Sample I made significant gains on the posttest. Significance levels were .01 or better for all comparisons.

In Table 4 the pretest comparisons for Sample I samples are presented. Referring to the t values in this table, it can be seen that there were significant differences among the entry levels of all of the Sub-samples as assessed by the pretest. The Fullerton-1 Group (summer session) performed better on the pretest than the Fullerton-2 Group (spring semester); the San Diego Students in Special Education obtained significantly higher pretest scores than either of the Fullerton sub-samples.

Posttest comparisons for Sample I sub-samples are presented in Table 5. The Fullerton-1 Group (summer session) obtained significantly higher post-test scores than the Fullerton - 2 Group (Spring semester). There was no significant difference between the posttest performances of the Fullerton -1 Group and the San Diego students; the San Diego students, however, scored significantly higher on the posttest than the Fullerton - 2 (Spring semester) students. The accepted level of signifcance was .05 or better.

4. Evaluation Data: Comparison Group and Sub-sample Ia

As shown in Figure 4, the comparison group closely resembled Sub-sample Ia with respect to age, credential objectives, and courses taken in education and psychology. The major differences between the two groups were in the number of men and in the number of subjects who had had classroom teaching experience. Thirty-three percent of Sub-sample Ia were men as compared wit

TABLE I.-- Number of Students in each descriptive category for total Sample I and Sub-samples (Students)

SUBSAMPLES		18 - 22 years	23 - 30 years	Over 30 years	Males	Females	Descriptive Categories: Classroom exp: Yes	Classroom exp: No	Elem. credential	Sec. credential	Sp.Ed. credential	No credential	Ed. courses: 0	Ed courses: 1 or >	Psych courses: 1	Psych courses: 2 or >
Ia: Fullerton - 1	N=30	11	9	10	10	20	8	22	14	16	0	0	11	19	20	10
Ib: Fullerton - 2	N=26	11	7	8	8	18	7	19	6	20	0	0	6	20	19	7
Ic: San Diego	N=32	11	14	7	6	26	19	13	3	3	23	3	4	28	6	26
Total Sample I	N=88	33	30	25	24	64	34	54	23	39	23	3	21	67	45	43

TABLE 2.-- Pretest and posttest means, Standard deviations, and range of scores for total Sample I and Sub-samples(college students)

Sub-samples	Pretest				Posttest		
	n	Mean	S.D.	Range	Mean	S.D.	Range
Ia: Fullerton - 1	30	47.83	11.21	29-75	71.96	8.14	52-86
Ib: Fullerton - 2	26	41.77	9.35	24-56	60.00	9.79	45-74
Ic: San Diego	32	54.38	10.02	27-74	71.28	10.81	47-86
Total Sample I	88	48.42	11.40	29-74	68.18	10.99	45-86

TABLE 3.-- Pre and Posttest comparisons for total Sample I and Sub-samples (Students)

Sub-samples	Pretest Mean	Posttest Mean	t	n
Ia: Fullerton - 1	47.83	71.96	13.10**	30
Ib: Fullerton - 2	41.77	60.00	12.33**	26
Ic: San Diego	54.38	71.28	10.42**	32
Total Sample I	48.42	68.18	19.48**	88

** $p < .01$

TABLE 4.-- Pretest comparisons for Sample I sub-samples

Sub-samples	Pretest Mean	t	df
Ia: Fullerton - 1	47.83		
Ib: Fullerton - 2	41.77	2.19*	54
Ia: Fullerton - 1	47.83		
Ic: San Diego	54.38	2.50*	60
Ib: Fullerton - 2	41.77		
Ic: San Diego	54.38	4.81**	56

* $p < .05$

** $p < .01$

TABLE 5.-- Posttest comparisons for Sample I sub-samples

Sub-samples	Posttest Mean	t	df
Ia: Fullerton - 1	71.97		
Ib: Fullerton - 2	60.00	5.01**	54
Ia: Fullerton - 1	71.97		
Ic: San Diego	71.28	.29	60
Ib: Fullerton - 2	60.00		
Ic: San Diego	71.28	4.04**	56

** $p < .01$

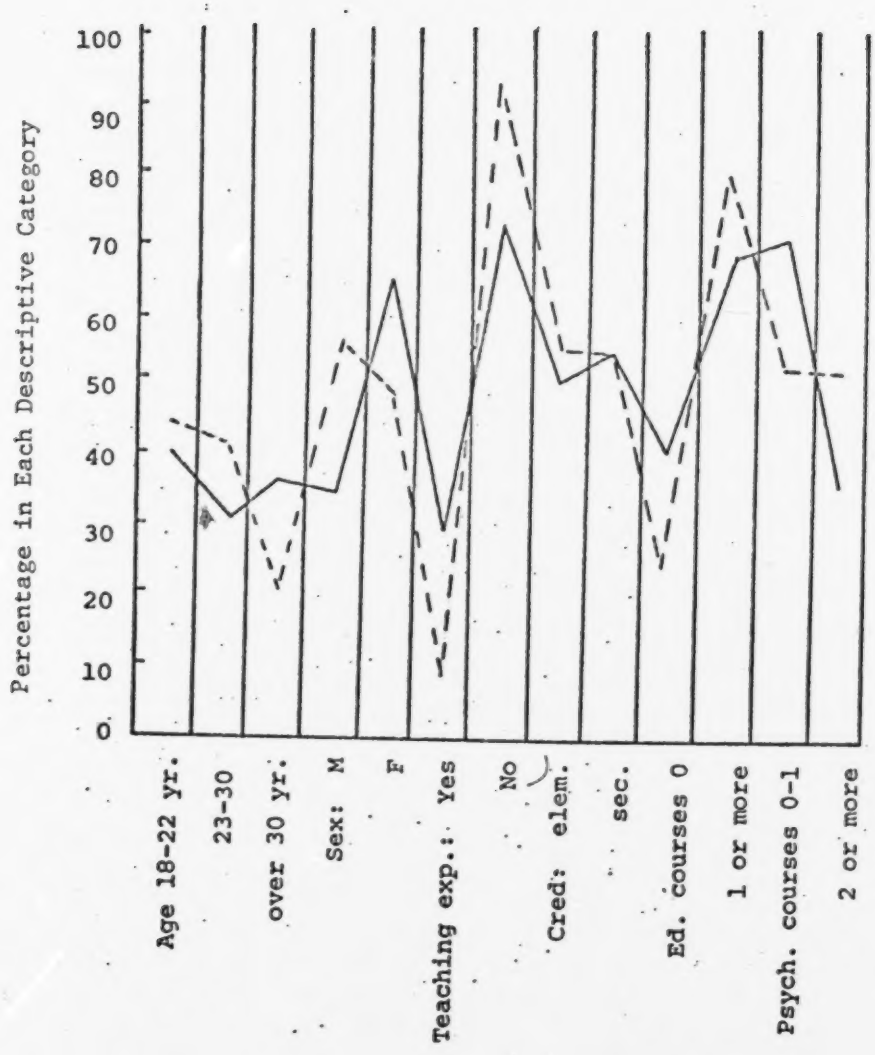


Fig. 4--Percentage of Sub-sample Ia and Comparison Sample in each Descriptive Category.

53 percent in the comparison sample; 26 percent of Sub-sample Ia had had prior classroom teaching experience while only 8 percent of the comparison group had it. Four percent of the comparison sample were not seeking teaching credentials; this group is not shown in the figure.

Table 6 shows the pretest and posttest means, standard deviations and range of scores for the comparison sample and for sub-sample Ia. Pretest scores ranged from 22 to 62 in the comparison sample as compared with 29 to 75 in Sub-sample Ia. Posttest scores ranged from 29 to 68 in the comparison sample as contrasted with the range of 52 to 86 in Sub-sample Ia. Test-retest reliability estimate for the comparison sample was .82. The 4.3 point difference between the pre and posttest means for the total comparison sample was significant.

TABLE 6.-- Pre and posttest comparison of comparison sample and sub-sample Ia

	Pretest			Posttest				
Groups	Mean	S.D.	Range	Mean	S. D.	Range	t	n
Comparison Sample	43.62	9.66	22-62	47.96	10.72	29-68	2.51*	26
Sub-sample Ia	47.83	11.21	29-75	71.96	8.14	52-86	13.10**	30

* p. $<$.05

** p. $<$.01

Table 6 shows that the posttest mean for Sub-sample Ia, who received instruction, is higher than the posttest mean for the comparison sample. When pretest means were contrasted, the resulting t value was 1.76 (df = 54), indicating no significant difference between these groups on entry level. Since the comparison sample made a mean gain of 4.3 points on the posttest, which can be attributed to a practice effect, a second pre and posttest comparison for Sub-sample Ia was made using posttest scores adjusted to take to take account of the practice effect. This analysis yielded a t value of 12.10 (df = 29, $p < .01$) which indicated that the difference between mean scores for Sub-sample Ia on the pre and posttests was still significant, even when the gain resulting from practice in test-taking was taken into consideration.

5. Evaluation Data: Sample II (Urban Teachers)

5.1 Pretest and Posttest.-- The pretest and posttest means, standard deviations and range of scores for the two Sub-samples in Sample II and for the total Sample appear in Table 7. Of the thirty-six teachers in Sub-sample IIa, two were not present for the posttest; therefore, the final number of subjects in this Sub-sample was thirty-four. Of the thirty-five teachers in Sub-sample IIb, 14 did not attend all of the workshops sessions and were therefore excluded from the study.

The subjects in Sub-sample IIa (Hacienda) fell into three age groups; eight subjects were between the ages of twenty-three and thirty years; eleven were between thirty-one and forty years, and fifteen were over forty years of age. The total group consisted of twenty-three females and eleven males. The majority of the participants had between ten and fourteen years of classroom teaching experience (N = 13); eight subjects had taught for 0-4 years, eight for 5-9 years, and five for fifteen or more years. Twenty-one of the teachers were teaching in regular education classrooms, and thirteen in special education classrooms at the time of the study. The special education teachers represented programs for the Trainable Mentally Retarded, Educable Mentally Retarded, Educationally Handicapped, and the Orthopedically Handicapped. Twenty-four teachers held regular elementary teaching credentials and ten held credentials in special education. Twenty-six teachers had taken six or more education courses beyond the credential requirement; five had taken 1-5 courses, and three had taken zero. Nine teachers had taken zero graduate psychology courses; nineteen had taken 1-5, and six had taken six or more. Twenty-one subjects had attended six or more inservice programs in the last three years, and thirteen had attended zero to five.

The subjects in Sub-sample IIb (Compton) fell into the three age groups as follows:

23 - 30 years = 4 Ss

31 - 40 years = 7Ss

Over 40 years = 10Ss

The total group consisted of nineteen females and two males, and was fairly evenly divided as to years of teaching experience:

0 - 4 years experience = 5Ss

5 - 9 years experience = 5Ss

10 -14 years experience = 5Ss

15 or more years experience = 6Ss

TABLE 7.-- Pretest and posttest means, Standard deviations, and range of scores for total Sample II and sub-samples (inservice urban teachers)

		Pretest			Posttest		
Sub-samples	n	Mean	S.D.	Range	Mean	S.D.	Range
IIa: Hacienda-La Puente	34	53.85	9.48	34-72	71.35	7.87	50-86
IIb: Compton	21	41.90	12.48	16-67	53.86	17.35	14-84
Total Sample II	55	49.29	12.12	16-72	64.67	14.98	14-86

Unlike sub-sample IIa, these teachers were all participating in various special education programs in the Compton district, although ten of the teachers did not hold special education credentials, and one was a teacher aide with no credential. Sixteen subjects had taken six or more education courses beyond credential requirements. Three teachers had taken no psychology courses (beyond credential); ten had taken one to five courses, and eight had taken six or more psychology courses. Five teachers had not participated in inservice in the last three years; eleven had attended one to five and five had attended six or more inservice programs in the last three years.

The test appeared to be at an appropriate level of difficulty for the teacher sample; the maximum score obtained on the pretest, out of a possible 95 points, was 72. The minimum score obtained was 16. Test-retest reliability estimate was calculated for Sub-sample IIa to be .79.

Table 8 presents the pre and posttest comparisons for the two teacher samples and for the total urban teacher group. The t values presented in the table indicate that the total urban teacher inservice group, and both of the Sub-samples, made significant gains on the posttest. Significance levels were .01 or better for all comparisons.

TABLE 8.-- Pre and posttest comparisons for total Sample II and Sub-samples (urban teachers)

Sub-samples	Pretest Mean	Posttest Mean	t	n
IIa Hacienda-La Puente	53.85	71.35	14.26**	34
IIb Compton	41.90	53.86	4.49**	21
Total Sample II	49.29	64.67	11.78**	55

** $p < .01$

Table 9 presents the pretest comparisons for Sample II and Sub-samples. Referring to the t values shown in this table, it can be seen that the pretest performance of the two urban teacher sub-samples was significantly different. The Hacienda teachers scored higher on the pretest than the Compton Group.

TABLE 9.-- Pretest comparisons for Sample II sub-samples

Sub-samples	Pretest Mean	t	df
IIa Hacienda-La Puente	53.85	3.89**	53
IIb Compton	41.90		

** P $<$.01

Posttest comparisons for Sample II sub-samples are shown in Table 10. This table indicates that Sub-sample IIa (Hacienda) performed at a significantly higher level on the posttest than did the Compton teachers (Sub-sample IIb).

TABLE 10.-- Posttest comparisons for Sample II sub-samples.

Sub-samples	Posttest Mean	t	df
IIa Hacienda-La Puente	71.35	4.26**	53
IIb Compton	53.86		

**p $<$.01

t calculated according to Cochran and Cox method for groups with different variances.

5.2 Comparison of Sample I and Sample II.--Table 11 shows the pre and posttest comparisons of Samples I and II.

TABLE 11.-- Pre and posttest comparisons of Sample I (students) and Sample II (urban teachers)*

	Pretest Mean	Posttest Mean
Sample I	48.42	68.18
Sample II	49.29	64.67
t	.43	1.59
df	141	141

* no differences were significant

Table 11 indicates that there were no significant differences between the performance of the student sample and the urban teacher sample on either the pretest or posttest.

5.3 Significance of Gains Made by Samples I and II on the Pre and Posttest.

Using the reliability estimate of .82 obtained for the comparison sample, where test-retest correlation was not confounded by the effects of instruction, the standard error of measurement was calculated for pretest and posttest scores, for each Sub-group in Samples I and II. These values are presented below:

	SEmeas Pre	SEmeas Post	Mean diff.
Sub-sample 1a	4.80	3.50	24.13
Sub-sample 1b	3.93	4.11	18.23
Sub-sample 1c	4.21	4.54	16.90
Sub-sample IIa	4.10	3.40	17.50
Sub-sample IIb	5.24	7.29	11.96

In all sub-samples except the Compton teacher group, the mean gains exceed three standard errors of measurement, even when the largest SEmeas value is used. It is evident that the gains made by the students and the Hacienda teachers could not have occurred by chance.

5.4 Implementation Checklist Data.--Sample II--Classroom implementation data were obtained by the trained observers for thirty-three of the thirty-four teachers in Sub-sample IIa; one teacher was absent from school at the time of the follow-up classroom visit. Implementation data were gathered for eighteen of the twenty-one teachers in Sub-sample IIb. Two subjects did not receive pre observations; one subject was a teacher aide; these three were dropped from this portion of the study. The pre and post implementation checklist scores, means, and standard deviations are presented in Table 12. The maximum possible score on the implementation checklist was 115. The pre implementation scores ranged from 5-61 for Sub-sample IIa and from 10-81 for Sub-sample IIb; the post implementation scores ranged from 4-72 for Sub-sample IIa and from 6-89 for Sub-sample IIb. Twenty-four teachers in Sub-sample IIa (n=33) obtained higher total scores on the post implementation checklist. Only seven of the eighteen Sub-sample IIb (N=18) teachers improved on the post-implementation checklist (total score). As shown in the table, the pre-implementation mean score for Sample II was 33.57, and the post-implementation mean score was 41.73. The difference between these two means was significant at the .01 level. Sub-sample IIa (Hacienda) made a significant gain on implementation scores; however, the Compton Group (sub-sample IIb) which began at a higher level of implementation, made no significant gains.

TABLE 12.--Pre and Post Implementation Scores means and standard deviations; Sample II sub-samples

Sub-sample IIa Hacienda-La Puente		Sub-sample IIb Compton	
Pre	Post	Pre	Post
23	44	82	89
61	56	49	31
58	34	31	42
29	29	50	35
39	72	58	41
49	31	43	21
40	54	16	13
15	17	22	37
8	29	63	72
22	60	78	80
8	48	16	54
47	55	46	36
40	67	72	72
34	46	41	36
16	39	30	65
28	59	10	6
37	57	24	9
28	72	60	54
7	25		
12	64		
33	19		
15	12		
42	62		
20	11		
30	31		
37	36		
22	40		
14	21		
16	20		
33	37		
25	47		
5	4		
28	37		

	Pre Mean	Pre.S.D.	Post Mean	Post S.D.	t	df
Sub-sample IIa	27.91	14.21	40.45	18.32	4.00**	32
Sub-sample IIb	43.94	21.40	44.06	23.72	.03	17
Total Sample II	33.57	18.74	41.73	20.46	3.15**	50

** $p < .01$

In Sub-sample IIa (Hacienda, N = 33) 79 percent of the teachers made one or more changes in their classrooms in the areas listed on the contract sheets. Fifty percent of the total group were successful in making two or more changes in their classrooms. Thus the 50 percent criterion level set or classroom implementation was met by Sub-sample IIa.

In Sub-sample IIb (Compton, N = 18) 78 percent of the teachers made one or more changes in their classrooms. Thirty-three percent of the total group successfully made two or more changes. Sub-sample IIb also reached the criterion level of 50 percent for classroom implementation.

Figure 5 shows the stated terminal objectives in each implementation area and the number of teachers in each sub-sample functioning at criterion in each area at the time of the pre and post observations as well as the number of teachers who increased the amount of stimulation, variety, and materials in their classrooms.

Fig. 5.-- Number of Teachers at Criterion Pre and Post Sub-samples IIa, IIb

	Sub-sample IIa		Subsample IIb	
	Pre	Post	Pre	Post
Objective	N = 33		N = 18	
1. By three weeks after the instructional phase, participants will have created an "open" or "decentralized" classroom including the following characteristics:				
a. a flexible furniture arrangement, i.e., furniture arranged for large, small groups and individual uses				
b. activity centers (2 or more) established which provide students with direct access to materials	13	16	12	16
2. By three weeks after the instructional phase, participants will have increased the amount of stimulation and variety in the classroom environment as evidenced by the presence in the classroom of novel materials such as: easy chair, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc.		11		6
3. By three weeks after the instructional phase, participants will have implemented an acceptable reward system; the system must include:				
a. teacher rewarding children for academic and social or management behaviors.				
b. different rewards for individual children, and/or				
c. student choice of reward	6	9	5	7

Figure 5.-- continued

Objective	Sub-Sample IIa Pre N = 33	Sub-Sample IIa Post N = 33	Sub-sample IIb Pre N = 18	Sub-sample IIb Post N = 18
4. By three weeks after instructional phase, participants will have implemented a contract system for student performance. To be considered acceptable the system must include all three of the following features: a. teacher initiates verbal or written contracts with individual students and/or revises or changes stated contract b. teacher (or aide) checks off student's work upon completion c. rewards are given and are contingent upon task completion and are given immediately following task completion	2	7	6	4
5. By three weeks after instructional phase, participants will have individualized instruction for students by: a. providing students with different level tasks in at least one subject area, or b. providing individualized student schedules which include: c. time for group tasks or activities, individual tasks and reward time.	5	7	15	14
6. By three weeks after instructional phase, participants will have increased the number of materials and equipment (Arts and Crafts, Audio-Visual, Games Science, Library) is use in the classroom.		21		8

The correlation between the pretest scores and the implementation checklist scores obtained prior to the inservice workshops was .20 for Sub-sample IIa (Hacienda) and .14 for Sub-sample IIb. A correlation of .45 was found between the posttest scores and the scores on the post implementation checklist for Sub-sample IIa; the correlation was .29 for Sub-sample IIb (Compton).

6. Evaluation Data: Sample III (rural teachers).

6.1 Pretest and Posttest.--the pre and posttest means, Standard deviations and range of scores for the two Sub-samples in Sample III and for the total sample are presented in Table 13.

Table 13.--Pretest and posttest means, Standard Deviations, and range of scores for total Sample III and Sub-samples (inservice rural teachers)

	Pretest				Posttest		
Sub-sample	n	Mean	S.D.	Range	Mean	S.D.	Range
IIIa: California	30	62.20	11.66	31-79	73.47	11.71	47-91
IIIB: Mississippi	18	56.44	11.24	41-78	63.06	10.46	39-81
Total Sample III	48	60.04	11.84	31-79	69.56	12.34	39-91

Of the 33 rural teachers in Sub-sample IIIa (California),three did not return their posttest by mail in time to be included in the study; therefore, test data for thirty teachers was analysed. All of the eighteen teachers in Sub-sample IIb (Mississippi) completed all phases of the study.

The subjects in Sub-sample IIa fell into three age groups as follows:

23 - 30 years = 12Ss
31 - 40 years = 5Ss
Over 40 years = 13Ss

The total group consisted of nine males and twenty-one females. The number of years of teaching experience of this group was:

0 - 4 years = 12Ss
5 - 9 years = 4Ss
10 -14 years = 4Ss
15 or more years = 10Ss

All of these teachers were participating in special education programs in California; twenty-one of the teachers held a special education credential; eight held regular teaching credentials and one was not credentialled. Eighteen of the teachers had taken six or more education courses beyond credential requirements. Eight teachers had not taken any graduate courses in psychology; eleven had one to five and eleven had six or more psychology courses. In this Sub-sample, fifteen teachers had attended one to five inservice programs in the last three years and the remainder had attended six or more inservices.

In Sub-sample IIIb, the age distribution was as follows:

Under 23 years = 4Ss
23 - 30 years = 10Ss
31 - 40 years = 2Ss
Over 40 years = 2Ss

There was only one male teacher in the group. Most of the teachers (N = 12) had zero to four years teaching experience; one had five to nine; three had ten to fourteen; and two had fifteen or more years of experience. All but two of the teachers were credentialled; fifteen of the group of eighteen teachers held special education credentials. Eight teachers held special education credentials. Eight teachers had taken no education courses beyond credential requirements; five had taken one to five courses, and five teachers had taken six or more psychology courses. Half the group had not taken graduate psychology courses; five had taken one to five courses and four had taken six or more. One third of the group had not attended any inservice programs in the preceding three years; ten teachers had attended one to five inservice workshops, and two teachers had attended six or more workshops.

Table 14 presents the pre and posttest comparisons for the two rural teacher sub-samples and for the total rural group. The t values presented in the table indicate that the total rural inservice group and both of the sub-samples made significant gains on the posttest. Significance levels were .05 or better for all comparisons.

Table 14.--Pretest and posttest comparisons for total sample III and sub-samples (rural teachers)

	Pretest Mean	Posttest Mean	t	n
Subsample IIIa (California)	62.20	73.47	7.22**	30
Sub-sample IIIb (Mississippi)	56.44	63.06	2.66*	18
Total Sample III	60.04	69.56	6.93**	48

** $p < .01$
* $p < .05$

Table 15 shows the pretest comparisons for Sample III sub-samples. There was no significant difference between the two rural sub-samples on the pretest.

Table 15.-- Pretest comparisons for Sample III sub-samples

Sub-samples	Pretest Mean	t	df
IIIa California	62.20	1.63	46
IIIb Mississippi	56.44		

In Table 16, the posttest comparisons for Sample III sub-groups are shown. The rural California teacher group scored significantly higher on the posttest than did the Mississippi group.

Table 16.-- Posttest comparisons for Sample III sub-samples.

Sub-samples	Posttest Mean	t	df
IIIa California	73.47	3.02**	46
IIIb Mississippi	63.06		

** p < .01

6.2 Comparison of Sample II (urban teachers) and Sample III (rural teachers).-- Table 17 shows the pre and posttest comparisons of Sample II (urban teachers) and Sample III (rural teachers).

Table 17.-- Pre and posttest comparison of Sample II (urban teachers) and Sample III (rural teachers)

	Pretest Mean	Posttest Mean
Sample II	49.29	64.67
Sample III	60.04	69.56
t	4.44**	1.75
df	101	101

** p < .01

Table 17 indicates that the rural teachers obtained significantly higher scores on the posttest than the urban teachers, but that this difference was not sustained on the posttest.

6.3 Significance of Gains made by Sample III on the Pre and Posttest.-- The standard error of measurement was calculated for pretest and posttest scores for both sub-groups in Sample III. These values are presented below:

	SE meas. Pre	SE meas. Post	Mean diff.
Sample IIIa	4.90	4.92	11.27
Sample IIIb	4.72	4.39	6.62

Neither of the groups in Sample III made gains as great or greater than three standard errors of measurement.

6.4 Implementation Checklist Data: Sample III.--Classroom implementation data were obtained by trained observers for 29 of the 30 rural teachers in sub-sample IIIa (California). One teacher was dropped because she was an itinerant teacher and moved from classroom to classroom which precluded a valid observation. Implementation data were obtained for all of the teachers in Sub-sample III (Mississippi). The pre-implementation scores for California ranged from 9 to 92 and 11 to 73 for sub-sample IIIb (Mississippi). The post implementation scores ranged from 13 to 106 in California and 51 to 102 in Mississippi. Twenty-six (26) of the 29 California rural teachers obtained higher total scores on the post implementation checklist. All of the rural Mississippi teachers obtained higher scores. The pre and post checklist scores, means and standard deviations are presented in Table 18. As shown in the Table, the pre-implementation mean score for Sample III was 44.00 and the post implementation mean score was 67.70. The difference between these means was significant at .01 level. Sub-sample IIIa (California) made a significant gain on implementation scores as did Sub-sample IIIb (Mississippi). All comparisons were significant at the .01 level.

Table 18.--Pre and Post Implementation scores, means and standard deviations for Sample III sub-samples.

Sub-sample IIIa (California)		Sub-sample IIIb (Mississippi)	
Pre	Post	Pre	Post
47	56	49	87
38	50	73	101
20	47	63	85
51	42	43	51
28	38	11	94
43	60	12	100
46	26	33	54
19	32	29	55
42	67	31	59
44	52	73	74
10	44	63	90
54	77	51	77
9	13	48	68
66	69	41	70
13	37	71	75
13	55	37	91
12	54	42	66
32	105	35	102
33	54		
51	71		
22	73		
75	79		
76	78		
51	63		
63	94		
70	93		
92	106		
70	69		
73	79		

Table 18.--continued

	Pre Mean	Pre S.D.	Post Mean	Post S.D.	t	df
Sub-sample IIIa	43.55	22.86	61.48	22.25	5.15**	28
Sub-sample IIIb	44.72	18.24	77.72	16.36	5.67**	17
Total Sample III	44.00	21.22	67.70	21.68	7.31**	46

** $p. < .01$

In Sub-sample IIIa (California, N = 29) 97 percent of the teachers made one or more changes in their classrooms related to the terminal objectives. Seventy-one percent of the total group were successful in two or more areas. Thus the 50 percent criterion level set for classroom implementation was met by this group of rural teachers who received the auto-instructional form of the package.

In Sub-sample IIIb (Mississippi, N = 18) 100 percent of the teachers were at criterion on at least one of the objectives by the time of the post observations in their classrooms. Ninety-four percent were successful in two or more areas. This Sub-sample met criterion for classroom implementation also.

Figure 6 shows the stated terminal objectives in each implementation area and the number of teachers in each Sub-sample functioning at criterion in each area at the time of the pre and post observations, as well as the number of teachers who increased the amount of stimulation, variety and materials in their classrooms.

Figure 6.--Number of Teachers at Criterion Pre and Post: Sub-Samples IIIa, IIIb.

Objective	Sub-sample IIIa Pre N = 29	Sub-sample IIIa Post N = 29	Sub-sample IIIb Pre N = 18	Sub-sample IIIb Post N = 18
1. By three weeks after the instructional phase, participants will have created an "open" or "decentralized" classroom including the following characteristics:				
a. a flexible furniture arrangement, i.e., furniture arranged for large, small groups and individual uses				
b. activitiy centers (2 or more) established which provide students with direct access to materials	19	25	0	3

Figure 6.-- continued

Objective	Sub-sample IIIa Pre N =	Sub-sample IIIa Post N = 29	Sub-sample IIIb Pre N =	Sub-sample IIIb Post N = 18
2. By three weeks after the instructional phase, participants will have increased the amount of stimulation and variety in the classroom environment as evidenced by the presence in the classroom of novel materials such as: easy chair, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc.		10		18
3. By three weeks after the instructional phase, participants will have implemented an acceptable reward system; the system must include:				
a. teacher rewarding children for academic and social or management behaviors.				
b. different rewards for individual children, and/or				
c. student choice of reward	14	26	3	12
4. By three weeks after instructional phase, participants will have implemented a contract system for student performance. To be considered acceptable the system must include all three of the following features:				
a. teacher initiates verbal or written contracts with individual students and/or revises or changes stated contract				
b. teacher (or aide) checks off student's work upon completion				
c. rewards are given and are contingent upon task completion and are given immediately following task completion	11	16	7	18

Figure 6.-- continued

Objectives	Sub-sample IIIa Pre N = 29	Sub-sample IIIa Post N = 29	Sub-sample IIIb Pre N = 18	Sub-sample IIIb Post N = 18
5. By three weeks after instructional phase, participants will have individualized instruction for students by:				
a. providing students with different level tasks in at least one subject area, or				
b. providing individualized student schedules which include:				
c. time for group tasks or activities, individual tasks and reward time	20	28	18	18
6. By three weeks after instructional phase, participants will have increased the number of materials and equipment (Arts and Crafts, Audio-Visual, Games, Science, Library) in use in the classroom.		25		18

The correlation between the pretest scores and the implementation checklist scores obtained prior to the inservice workshops was .31 for Sub-sample IIIa (California) and .82 for Sub-sample IIIb (Mississippi). A correlation of .32 was found between the posttest scores and the scores on the post implementation checklist for Sub-sample IIIa; for Sub-sample IIIb the correlation was .20.

6.5 Comparison of Sample II and Sample III Implementation Scores.-- Table 19 compares the pre and post implementation total scores for Samples II and III (urban vs rural teachers).

Table 19.-- Pre and Post Comparison of Implementation Scores: Sample II and Sample III.

	Pre Mean	Post Mean
Sample II	33.57	41.73
Sample III	44.00	67.70
t	2.59*	6.10**
df	96	96

*p $\leq$ .05
**p $<$ .01

Table 19 indicates that there was a significant difference between rural and urban teachers on the pre implementation checklist. This difference was sustained on the post implementation checklist with the rural teachers scoring significantly higher than the urban teachers.

6.6 Comparison of Sample I (students) and Samples II and III (teachers).-- The urban and rural teachers samples were combined and their performance was compared with that of the total student sample. The students obtained a pretest mean score of 48.92 while the mean pretest score for teachers was 54.30 ($t = 3.34$, $p < .01$, $df = 189$). On the posttest the student mean was 68.18 as compared with 66.95 ($t = .68$, $df = 189$), indicating no significant difference between students and teachers on terminal performance.

Discussion of Results

1. Needs Survey

The needs survey gave support to the position that a product such as the one developed in this study would be useful to teachers. Support was also obtained for the notion that although many teachers have been exposed to new concepts and techniques, the extent to which they implement them in their classrooms could be broadened considerably.

2. Users' Evaluation of Instructional Package

The results of the users' evaluation indicated some aspects of the design and content of the instructional package which were modified or extended. Indicated changes were made before the package was produced in the final sound filmstrip format which was used with Sample III.

3. Evaluation Data: Sample I

Sample I consisted of three sub-samples of university students. Two of these sub-samples were enrolled in a foundations course in educational psychology--typically the first course in the pre-professional sequence. The third student sub-sample consisted of advanced special education students.

The results indicated that the instructional package is very effective in helping education students at the preservice level to master the concepts and knowledge of techniques involved in creating a de-centralized classroom, managing the behavior of learners, and sequencing instructional materials. Regardless of the entry characteristics of students in terms of credential objective,prior teaching experience, and college courses in education and psychology, exposure to the instructional package developed in this study resulted in significant learning gains.

As would be expected the student group which had the most classroom teaching experience and the most exposure to special education courses obtained significantly higher pretest scores than the other two student sub-samples. Special education students and the group of regular students in which the majority were pursuing an elementary credential showed no significant difference on posttest scores. The pre/posttest gain was significant for the student group which consisted mainly of secondary credential seekers although their terminal performance was significantly lower than that of the other two student sub-samples. These findings indicate that the instructional package--designed for elementary teachers--is most effective with prospective elementary teachers and is equally effective with Special education and regular elementary credential students.

4. Comparison Sample

The pretest and posttest data were obtained for the comparison sample at approximately the same time of year as were the Sub-sample Ia data. The two groups were very similar with respect to age of the students and prior educational experience. The ranges of scores on the pretest were comparable. Sub-sample Ia and the comparison sample appeared to be drawn from the same population.

4. Comparison Sample - continued

The mean gain for the total comparison sample of 4.3 points on the posttest was attributed to a practice effect. Since the test was designed as a learning experience, some improvement was to be expected.

Contrasting Sub-sample Ia and the comparison sample revealed that the significant gains made by Sub-sample Ia subjects on the posttest could not be accounted for merely by practice in test-taking or by the time interval which elapsed between the pretest and posttest. While taking the test twice resulted in a signficant gain in the posttest score, the final scores of the comparison sample did not in any way approximate the magnitude of the scores obtained by the group receiving instruction.

5. Evaluation Data: Sample II (Urban Teachers)

5.1 Pretest and Posttest.--Sample II consisted of two groups of teachers from school districts in Los Angeles County. One district could be described as socio-economically and ethnically mixed; the other district is in a predominately black, lower-income area. In Sub-sample IIa the teacher participants were clearly volunteers since their selection was entirely the responsibility of the project staff. In Sub-sample IIb, district personnel were reponsible for the identification of participants. The high attrition rate in Sub-sample IIb suggested that this group consisted of teachers who were not volunteers for the study and who had little committment to its objectives. Approximately 60 percent of the teachers in Sub-sample IIa were regular education teachers; all of the teachers in Sub-sample IIb taught in special education programs. The results indicate that the instructional package is very effective in helping urban teachers to master the concepts and techniques presented. Regardless of the entry characteristics of the groups in terms of years of teaching experience and training background, exposure to the instructional package resulted in significant learning gains in the groups of teachers sampled.

The mean gain for Sub-sample IIa teachers was 17.50 as opposed to a mean gain of 11.96 for Sub-sample IIb. The results indicated that Sub-sample IIa began and ended the instructional sequence at a significantly higher level than Sub-sample IIb. Some of the differences in entry characteristics between these groups have already been described; it is also of interest that the two groups of teachers were quite differently constituted with regard to sex and years of teaching experience. The high scoring group (Sub-sample IIa) consisted of 33 percent men whereas Sub-sample IIb was only 10 percent male; the majority (38%) of Sub-sample IIa had ten to fourteen years of teaching experience as compared with the 25% falling in this category in Sub-sample IIb which was almost equally divided into the four experience levels. Until a more refined analysis is made of the data, the factors which may account for the significant differences in entry and exit levels between the groups of urban teachers are in the realm of speculation. It seems

reasonable to assume, however, that the variable of teacher self-identification may be critical. This assumption is based on the fact that Sub-sample IIa, consisting of all volunteer participants, made gains sufficiently great to rule out the possibility that these gains occured by chance.

5.2 Comparison of Sample I and Sample II.-- The findings here suggest that the instructional package is equally effective in teaching concepts and techniques to both preservice and inservice level teachers.

5.3 Significance of Gains.-- See discussion under 5.1

5.4 Implementation Checklist Data.--The manner in which the inservice workshop was conducted provided a stringent test of the capability of the instructional package to effect changes in the classroom behavior of teachers. The fact that there was a significant difference between the two sets of implementation checklist scores for Sample II indicated that the content of the instructional package was an important factor in promotion classroom implementation of the techniques of creating an effective learning environment, managing the behavior of learners, and sequencing instructional materials. It is important to note that it was the performance of Sub-sample IIa (Hacienda) teachers which accounted for all the gains in implementation.

The failure of Sub-sample IIb teachers (Compton) to demonstrate significant gains in their implementation scores appears to be the result of at least two factors. One was the self-identification question, and the other was a less consistent performance of the trained observers (as compared with their observations of Sub-sample IIa).

Although Sub-sample IIb teachers did not make significant gains in implementation scores, fourteen of the eighteen teachers improved to criterion on at least one implementation objective (Figure 3, p.14). Both Sub-samples in the urban teacher group exceeded the criterion level of 50 percent for classroom implementation.

The correlations between test scores and implementation scores indicated a trend toward an increased relationship between knowledge of concepts and their application in the classroom following exposure to the instructional package.

6. Evaluation Data: Sample III (rural teachers).

6.1 Pretest and Posttest.--Sample III consisted of two groups of special education teachers in rural areas in the States of California and Mississippi. In Sub-sample IIIa (rural California) the project team was responsible for training the classroom observers. All of the teacher participants were self-identified and were asked to re-affirm their committment to the project objectives. As stated earlier, these conditions were not met for Sub-sample IIIb. This sample received the auto-instructional form of the package. The results indicate that the self-instructional package is very effective in helping rural special

6.1 Pretest and Posttest--continued

education teachers to master the concepts and techniques presented. Exposure to the filmstrips and the guidebook resulted in significant learning gains in the groups of teachers sampled. The mean gain for Sub-sample IIIa was 11.27 as opposed to a mean gain of 6.62 for Sub-sample IIIb. The results indicated that Sub-sample IIIa (California) made significantly higher scores on the posttest than did the Mississippi group although there was no significant difference between the entry level of these two sub-samples. Further analysis of the data is required in order to interpret this finding. Sample III teachers obtained a higher pretest mean than any other group studied. The fact that they did not make gains large enough to entirely rule out the possiblity that changes in pre-post scores resulted by chance may be attributable to regression effects. The computation of residualized gain scores for this sample would provide needed clarification.

6.2 Comparison of Sample II (urban teachers) and Sample III (rural Teachers).--The rural teachers as a group began the instructional sequence with more knowledge of concepts than did the urban teachers; this difference was not reflected on the posttest. The fact that the rural teachers returned their tests to their district (or state) liaison person and thus were not anonymous participants may partially explain this finding; in other words, the rural teachers may have been more highly motivated to perform than the urban.

The finding that the urban teachers who saw only the prototype product and did not receive copies of the guidebook performed as well on the posttest as the rural teachers who received the completed instructional package indicates that the filmstrips and programmed exercises alone are sufficiently powerful to promote concept mastery.

6.3 Significance of Gains made by Sample III on the Pre and Posttest.--

See discussion under 6.1

6.4 Implementation Checklist Data: Sample III.--The fact that there was a significant difference between the pre and post implementation checklist scores indicated that the content of the package when presented in a totally self-instructional format was a significant factor in promoting classroom implementation of new techniques. The 50 percent criterion level set for classroom implementation was vastly exceeded by both Sub-samples. In both groups the majority of the teachers were successful in two or more areas of the checklist.

6.5 Comparison of Sample II and Sample III Implementation Scores.-- The rural teachers as a group appeared to be implementing in more areas of the checklist before receiving instruction than were the urban teachers. The mean difference between these groups on entry was 10.43; this difference widened to 25.97 following instruction, indicating that the rural teachers implemented to a much greater degree than the urban teachers. While this finding could point to some characteristic difference between the urban and the rural teachers, the most obvious explanation is the fact that the rural teachers had the advantage of self-pacing in the instructional phase as well as the additional material contained in the guidebook. It appears that the detailed resource material in the guidebook promotes greater implementation.

6.6 Comparison of Sample I (students) and Samples II and III (teachers).-- The results indicated that the teachers entered the instructional phase with more knowledge of concepts than did the students, but that there was no significant difference between these two groups on the posttest.

7. Teacher Reactions and Comments:

Upon completion of the study, an open-ended evaluation form (Appendix XX) was mailed to all of the 33 rural teacher participants in California. Nineteen teachers returned the form. The following excerpts from the informal evaluations reflect the qualitative and dynamic effects of the instructional package:

"The general philosophy portrayed has colored my whole approach to teaching and helping EMR's."

"I feel it's created a much more relaxed and cooperative atmosphere and greater independence."

"The children really enjoy the classroom atmosphere, especially with different centers."

"(The package) gave me loads of good ideas and new techniques to use in my classroom. Very helpful for teachers with Special Education classes."

"Material presented is an excellent resource for any classroom program. Presentation is highly motivational to teachers-overcoming my reluctance to try centers with E.H. children...The variety of ideas allows sufficient adjustment for all children's benefit."

"The children were very responsive to choosing their own assignments and filling in their own sheets. They seemed happier and more interested in their work."

"I appreciated the guidebook most and will continue to refer to it".

"I have never been so excited about a program."

"The handbook proves to be a valuable reference whenever a concept dims or a new problem arises."

"I had taught E.H. class for 2 years preceding this. During the summer I had examined the various programs I had tried and had decided which areas I would implement and expand this year. I was getting my new program into operation when your program arrived. The further I went in your program the more I was reinforced that I was going in the right direction. Your package provides support for my ideas and supplied related ideas to enable me to easily expand my existing program into an open classroom atmosphere."

"The children's attitudes became more self-reliant. They took more responsible attitudes toward their own behavior."

"I had to change my year's goals--they were accomplished in a quarter."

"I felt the package was a very good guide and introduction to the integration of classroom structure, behavior management and individualization. Often these are studied and taught separately and teachers have difficulty visualizing these functioning together."

8. Conclusions

The use of the media package, Structuring the Classroom for Success" developed in this study, with preservice and inservice level teachers, demonstrated that:

a. All groups made significant learning gains in the mastery of concepts and knowledge of techniques.

b. Inservice teachers brought more knowledge and information to the instructional sequence, but their terminal performance and the terminal performance of the preservice level subjects was not significantly different.

c. The post implementation checklist scores for the teacher groups were significantly higher than the pre implementation checklist scores, indicating that exposure to the instructional sequence resulted in changes in the classroom behavior of the teacher participants.

d. The visual sequences and programmed exercises when presented in a face-to-face situation are as effective in promoting concept mastery as is the total auto-instructional package when viewed by individuals over time.

e. The addition of the guidebook containing detailed resource material seems to result in greater implementation of new techniques in the classroom.

8. Conclusions--continued

f. Beyond the quantifiable changes in the classroom behavior of teachers, there appears to be qualitative changes in teacher attitudes, as well as changes in the behavior of their pupils, which are attributable to the teachers' exposure to the instructional package.

9. Summary

The first objective of this study was to create a media package which would promote change in teacher behavior in the classroom. The six sound filmstrips and their accompanying guidebook, described earlier, were specifically designed to demonstrate how the components of classroom environent. activity centers, behavior management, and the selection and sequencing of instructional materials are interrelated in a classroom structured for effective learning. A variety of types of classrooms and grade levels were presented in the visuals to emphasize that individual teachers have unique ways of creating a stimulating learning environment. The final version of media package was auto-instructional in that it was self-contained and self-paced. The production of the media package demonstrates that the first objective of the study was met.

The second objective of the study was to design evaluation instruments to assess change in teacher behavior in the classroom and to measure cognitive mastery of the content presented in the media package. Accordingly, a twenty-five item pre and posttest and a classroom implementation checklist were designed. These instruments were used to evaluate the effectiveness of the media package with preservice and inservice teacher groups. The results indicated that both the preservice and inservice level teachers made gains in content mastery as a result of their exposure to the instructional package. As a group, the inservice teachers also made gains in the area of implementation; the criteria level of 50 percent of the teachers successfully initiating at least one change in their classrooms within three weeks after their exposure to the instructional package was exceeded by all teacher subgroups sampled. Therefore, it may be stated that the second objective of the study was met. The media package stands alone and is effective not only in teaching concepts and techniques, but also in helping teachers to implement these concepts and techniques in such a way that their behavior in the classroom is changed in a positive manner.

Scope of the Study

This study was restricted to the development and evaluation of a mediated instructional sequence composed of five interrelated content areas. The evaluation focused on the effectiveness of the instructional sequence in facilitating mastery of concepts and techniques and the implementation of these concepts and techniques in the classroom. Students in education classes in two Universit es in California; teachers in two urban school districts in Southern Ca fornia; and rural teachers in California and Mississippi participated in the evaluation. A sample of 88 college students, 55 inservice urban teachers and 48 inservice rural teachers was considered adequate for the evaluation. Trained observers were used to collect pre and post data on classroom implementation. A three week interval between instruction and follow-up was considered adequate to determine the extent to which teachers changed in their classroom behavior.

Scope of the Study--continued

No attempt was made to obtain a random sample of inservice or preservice level subjects, and no attempt was made to control for number of years of teaching experience or related educational background.

Recommendations for Product Use

1. The instructional package will be most effective with teachers who identify themselves as being responsive to new ideas and motivated to change their classroom behavior.

2. The package is effective with both regular elementary and special education teachers.

3. Preservice level education students in both regular and special education courses will benefit from this instructional sequence.

4. The effectiveness of the package is increased if each participant is provided with a personal copy of the guidebook.

5. Support from the school administrative level may increase the extent to which teachers are able to successfully implement new procedures in their classrooms.

6. The instructional phase for inservice participants should be self-paced.

Suggestions for Further Study

1. The ultimate test of the effectiveness of the instructional package would be to find out if the changes in teacher behavior persists over time.

2. Evaluation of the effectiveness of the media package when combined with other instructional strategies for teacher inservice.

3. A follow-up study which attempts to demonstrate that significant positive changes in the behavior of teachers in the classroom are correlated with positive changes in the amount and/or quality of learning in their students.

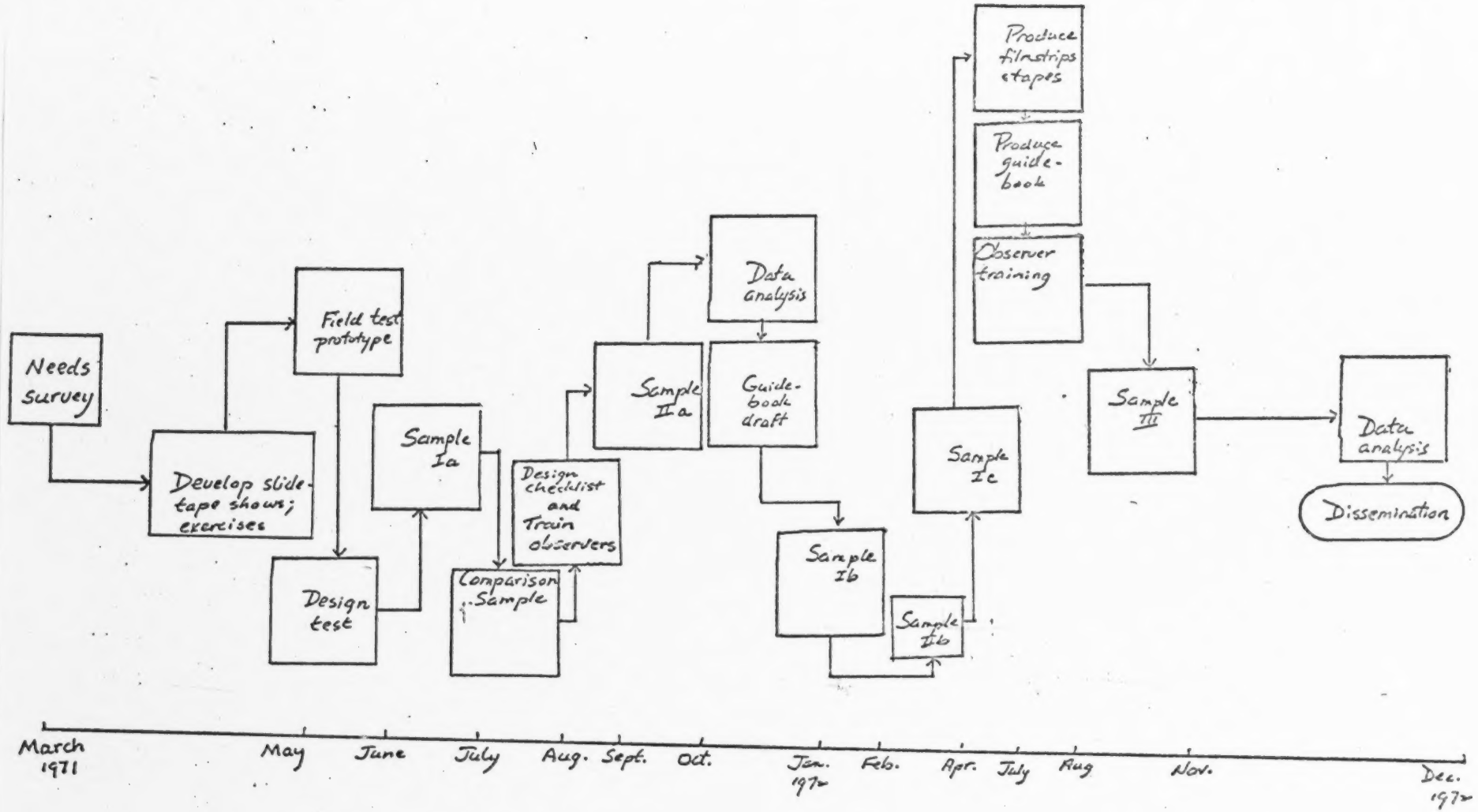
4. A study should be made of the effect of having several teachers, aides and the principal from one school participate together in the instructional sequence. Such a study would help to answer the question of how implementation can be facilitated when it is reinforced at the faculty and administrative levels.

5. An attempt should be made to develop the classroom observer training sequence, designed in this study, into a mediated self-instructional package. Such a product would permit schools or districts to collect their own evaluation data regarding the effects of teacher utilization of "Structuring the Classroom for Success".

APPENDICES

APPENDIX I

TIME LINE FOR PRODUCT DEVELOPMENT AND EVALUATION



Time Line for Product Development and Evaluation
March, 1971 - December, 1972

APPENDIX II

NEEDS SURVEY AND COVER LETTER

Nogales Elementary #1
Wade Carpenter, Superintendent
402 Martinez Street
Nogales, Arizona 85621

Dear Mr. Carpenter:

The Instructional Materials Center Special Education is working on a project to produce an auto-instructional media package consisting of six sound filmstrips and a programmed guidebook. The filmstrips will demonstrate how to structure and create a stimulating classroom learning environment. Specifically, they will show how to create activity centers, select appropriate rewards, manage behavior and sequence materials. (The content outline of each filmstrip is enclosed.) The filmstrip package will be available to all special educators through the IMCSE upon completion.

We are writing to ask your help in determining the needs of the special education teachers in your area for such a media package and to ask your opinion of its potential usefulness.

In addition, in order to help us establish the format of this filmstrip package that will be most useful to the teachers, we must know the kinds of equipment that are available to them. (A filmstrip accompanied by a sound track on cassette tape will hardly be useful if the teacher has no cassette playback machine.) We would appreciate very much your answering the short questionnaire enclosed with this letter and returning it to us by April 30, in the stamped self-addressed envelope enclosed.

We would also like to take this opportunity to invite you to participate in the final evaluation of this product which will be conducted in counties such as yours. We anticipate that this will begin in the Spring of 1972.

We will be selecting individual teachers to participate and offering inservice workshops. If you feel that your district would be interested at that time in being a part of our field testing, we will be happy to hear from you by phone or letter now.

Sincerely yours,

Marilyn Higgins
Research Associate

NEED SURVEY

1. a. ____All
   b. ____Most of the special education teachers in the district
   c. ____Some
   d. ____None

   have been exposed to material similar in content (concepts of behavior modification and systems design) to the films described. (If none, go on to question 4)

2. Those who have been exposed to this material have obtained it from:
   a. ____ In-service training with consulting specialists
   b. ____ Coursework leading to original credential
   c. ____ Additional coursework at graduate level
   d. ____ Outside reading on his own
   e. ____ Other (explain:_____.)
   (check all appropriate)

3. Of the ones exposed how many have tried to implement the material in the classroom?
   a. ____ under 10%
   b. ____ under 20%
   c. ____ under 30%
   d. ____ under 50%
   e. ____ over 50%

4. How useful do you think the media package described will be to the special education teachers in your district?
   a. ____ very useful
   b. ____ somewhat useful
   c. ____ slightly useful
   d. ____ not very useful

5. Which of the following equipment are available to the special education teachers in your district? (Please give number of each if possible)

	(Available)	(Number)
a) Record Player	_____	_____
b) Filmstrip Projector	_____	_____
c) Du Kane	_____	_____
d) Cassette	_____	_____
e) Reel-to-Reel Tape Recorder	_____	_____

6. If your district plans to obtain any of the listed equipment in the near future please indicate which ones and in what quantity.

	(Plan to obtain)	(Number)
a) Record Player	_____	_____
b) Filmstrip Projector	_____	_____
c) Du Kane	_____	_____
d) Cassette	_____	_____
e) Reel-to-Reel Tape Recorder	_____	_____

f) _____ The district does not plan to obtain above equipment in the near future.

7. How many elementary teachers of the educable mentally retarded and emotionally handicapped are there in your district? _____

8. We invite any additional comments you may have concerning this project:

APPENDIX III

SCRIPTS FOR FILMSTRIPS I-VI

SCRIPTS FOR SOUND FILMSTRIPS I-VI

I. Overview

Effective learning takes place through frequent, varied, and intense encounters with the environment. A classroom environment which is exciting and challenging encourages children to be active, reflective, and aware.

This classroom environment is designed to be responsive to the varied interests and unique needs of the students within it.

Instructional materials and tasks which arouse curiosity and permit movement, discovery and mastery surround the learners. Many techniques for gathering information and communicating knowledge are available.

When children share in creating their learning environment, and when they have opportunities to make choices about how they will function in it, their behavior becomes directed and structured by their own activities, rather than by textbooks and routines. They find that the classroom is a place to practise new skills, explore alternatives, and study the results of their decisions. The creation of Learning Centers provides an open, yet organized, basis for an effective learning environment. While many arrangements are possible, some teachers plan the room around the Achievement Center. This is an area where students work on individualized academic tasks and assignments which the teacher has scheduled for them in their daily folders. Surrounding space is needed to house task sheets and resource materials. Other areas of the room are designed as reward and enrichment centers. Learning games, science experiments and displays, creative activities and audio-visual equipment may be located in designated centers and, are available to students whose Achievement Center assignments are completed. Children develop the ability to work independently while experiencing the freedom to share thoughts and feelings with their teacher and peers. Students delight in contributing their possessions to the centers, and they become responsible for caring for the contents of the various centers.

When the classroom is structured in such a way, the teacher is able to help individual students develop the

patterns of self-directed behavior necessary for success experiences. Since behavior patterns are learned through reinforcement, the teacher who rewards the child positively and systematically for his efforts, or accomplishments, increases the probability that the child will continue to respond appropriately in the classroom. Initially, rewards must follow the behavior immediately so that the child will come to associate them with his actions, and to learn that his behavior has predictable results.

Some students need only a smile or a word of praise from the teacher, while others require tangible rewards to strengthen acceptable behaviors. When the teacher discovers what is rewarding or reinforcing to a particular child she gains access to a powerful tool for motivating learning.

A series of contracts can then be made between the teacher and the student. First the teacher selects a task which the child can accomplish, and tells the child that when he has completed the task, he can spend a specified amount of time in an activity he enjoys. Gradually, the teacher arranges the contract so that the student learns to delay reinforcement. Perhaps he can earn checkmarks or other tokens for finished work; he can later exchange these for reinforcing events in the classroom. Once the child begins to gain academic and personal skills he soon discovers that learning is its own reward. Learning then takes over as a source of motivation and external rewards become less important.

The success of the plan is dependent upon the teacher's expertise in constructing and choosing tasks which are within the child's ability level and interest area. Sequencing tasks in steps small enough to insure continuous successful accomplishment allows the student to increase his skills at his own rate. Task sequences can be alternated with reinforcing activities on the assignment sheet in the child's daily work folder. The folder may include both text and workbook exercises as well as teacher-made materials encompassing a wide variety of academic subjects. By reviewing the child's folder each day, the teacher can constantly evaluate his performance, and modify his future assignments accordingly.

Structuring the classroom for success is an on-going process, developing out of the actions of students and teachers. To begin you need only a belief in the potential of children, and a willingness to allow them to become the individuals they <u>care</u> to become.

II. Room Environment

In designing a classroom for effective learning, you can begin with the total room environment. An atmosphere which matches the auditory and visual intensity of our complex, colorful and fast-paced world is most likely to capture the interest and enthusiasm of today's students.

There are as many ways to create a learning environment as there are teachers and students. The total room arrangement should reflect not only the teaching style of the instructor, but also the interests and learning needs of individual students. Here is a decentralized classroom. Students have direct access to a wide variety of learning materials and activities. They are permitted to make choices about what they want to learn and how they will learn it. Students are free to choose and change their seats, so is the teacher.

There are individual work-study areas, small group areas, quiet places for reading and listening, and space for conducting projects. The atmosphere is alive, fun, and as real as the world outside.

This classroom is responsive to the needs of individual learners. Music, special lighting effects, and colorful visuals surround the student, inviting him to utilize all of his sensory channels in learning about the world of people, symbols and things. Films, tapes, and records are available. The emphasis is on motion, novelty, change. Materials placed in the room are those which will elicit curiosity, discovery, exploration and mastery. The students bring items which fascinate them, and the contents of the room are continually changing and being rearranged. Resources for acquiring information and skills are always available. The student interacts with real objects and events, and responds actively to his environment. He gains firsthand experience in managing, predicting and mastering his environment.

Children learn in different ways. A variety of materials which allow children to express, record and communicate their responses to the environment are provided. The tape recorder, camera, and overhead projector are additional examples. One way to create and structure a successful learning environment is to plan the classroom around several "centers." The core of the room might be an area called the "Achievement Center." Outside this space, several self-contained learning centers can be established. Learning centers which might be introduced are: an

Activity-Games Center, Library Center, Science Center, Audio-Visual Center, and an Arts and Crafts Center. In the centers the students find a wide assortment of meaningful activities, selected and paced in accordance with their interests and ability levels.

Use of the centers can be scheduled for each child, thus creating a flexible, yet structured, way of insuring that children will find the classroom an exciting place to be, and a place where there is always something fun or challenging to do when work is finished. An exciting classroom does not distract the learner if the task activity which is required of him is as interesting as the room itself. The teacher determines and enforces the ground rules for student performance. When students know what is expected of them, they tend to perform accordingly.

When the environment is regarded as a partner in learning, the student shares in creating his own learning environment and in deciding how best to use it. He learns that he can make choices about how he operates in this environment within the limits established by the teacher. He experiences meaningful interaction with other students. He can choose to work alone or in a small group. Sometimes two or three students will work together with one acting as a tutor. Instruction can be self-paced and individualized. Such a system allows the student to become an independent, self-directed learner.

III. Creating Activity Centers

The creation of activity centers allows for flexibility and variety in the classroom while optimizing the organization of both physical space and learning experiences. Interesting task activities can be classified for individual students and for groups. Students find that meaningful rewards are available to them when tasks are completed. Now, a closer look at the Achievement Center. Here groups of tables or desks can be placed together. Space is provided for the teacher to sit beside a student to assist him with his work, if necessary. Note that the work tables, or desks, need not be arranged in rows; furniture can be regrouped to suit the demands of any particular learning activity. In the Achievement Center the student has a place to work independently, to organize his materials, and to complete academic tasks which the teacher has sequenced appropriate to his level. The Achievement Center is set up first, and is somewhat removed from the rest of the classroom. Additional space

is provided so that materials can be cleared off the desks or tables. Students assume the responsibility for maintaining the functional atmosphere of the Center.

Another area which could be established is an Activity-Games Center. Here the focus is on materials which help to train eye-hand coordination and other visual perceptual abilities. Learning games and puzzles help the student to develop efficient problem-solving skills, such as planning and working out strategies. Children learn, through games, to cope with frustration and disappointment, and to relate with their peers; in addition they may be gaining practice in academic skills. At first the Activity-Games Center may function as a reward area where students participate in fun activities when their academic tasks are finished.

The Library Center might be located in a corner of the room. Here the students find a quiet, restful place for individual study or recreational reading. A small carpet and an easy chair create a comfortable atmosphere. A typewriter and table may also be included.

Designed to stimulate the student to explore his environment, the Science Center is a busy place. Some materials which might be included here are: animals and fish; plants or a terrarium; a rock collection or a science experiment; microscopes, a magnifying glass, and measuring instruments.

Projects and displays are changed weekly in accordance with the interests of the students. Materials may be gathered from many different sources. The teacher can investigate the science supplies available in the school district, the local pet store, or from interested parents, friends, or other teachers. Sometimes supplies may be traded from classroom to classroom. The children themselves are encouraged to add to the Center with their own possessions. The Audio-Visual Center houses concept films, filmstrips, slides, tapes, records, a Language Master, and an overhead projector. Headsets permit several students to use this area at one time. Students learn to operate and care for the equipment. This provides an additional avenue for skill development and the opportunity to gain confidence through successful experience.

In the Arts and Crafts Center models, sewing kits, paints, clay and tools are available. Students work on individual projects or cooperate with others on larger construction tasks. Activities which provide a considerable degree of inherent structure are balanced with those that allow the

student to express himself freely and creatively. A classroom arranged around centers provides a reasonable alternative to group instruction. The teacher has more time to devote to assisting individual students or to working with small groups. The students have the opportunity to develop a sense of responsibility and pride in their accomplishments. Learning is facilitated because tasks are designed to meet the needs of the learner and to be challenging and rewarding-like this code-breaking problem. Initially the use of the centers by the students may have to be programmed in their daily work folders. For non-readers, color codes may be devised. All the students share the task of maintaining the Centers. They bring new materials to put in them, and help to set them up. Again, the emphasis is on newness and change. These girls and their teacher are arranging a Self Improvement Center. At first, a distinction is made between the Achievement Center and the reward area.

As the students learn to operate within the system, this distinction becomes unnecessary. The students interact with people and materials; they learn to make choices and decisions, and to plan their own activities. This boy uses a minute minder to time his own performance. Through assuming more responsibility for their actions in the classroom, students experience the joy of learning.

IV. Behavior Management Principles

Appropriate behavior enables people to function successfully, efficiently and happily in their environment. Every interaction with the environment and every encounter with the people in it has a consequence for the individual and thus shapes his behavior. Behavior patterns and responses are learned; this boy has learned to hit the ball. The manner in which the individual interacts with his environment determines what behavior is learned. This boy, after getting hit by the ball, angrily leaves the game. Previously learned ways of behaving can be changed, however, because behavior responds to training and to appropriate manipulation of the environment. Encouragement and support from team mates can change this boy's tendency to quit when things are not going well.

Rewards are basic to life. When a person is rewarded for behaving in a certain way, the likelihood of his continuing to behave in this way is increased. Rewards strengthen the behavior which precedes them, so they are called reinforcers. Rewards may be anything that is

desired or needed by the individual. Attention from others, special privileges, money, grades, and ice cream can all be rewards.

Unfortunately, we often reinforce inappropriate behavior such as crying. Giving a child a favorite cookie to get him to stop crying can reinforce crying behavior. The child may learn that this is an effective way of getting what he wants, and so he is likely to repeat this behavior in the future. In other words, inappropriate behavior develops and is maintained in the same manner as appropriate behavior--through reinforcement.

In the classroom we want to reinforce children for behaviors we have selected as being desirable. This means that it is important for the teacher to know what behavior is being reinforced, and to know how to give rewards on a systematic basis. As soon as the student begins to behave appropriately, the response needs to be strengthened through reinforcement. The reinforcer must be given immediately so the child will be able to understand that there is a relationship between her response and the reward. At first, for each correct letter in her name, Rachelle is given a star. In teaching new behaviors we must continue to give rewards often or the response will be forgotten. Gradually the teacher begins to demand from the student a more complete response, or longer intervals of correct responding, and will withhold reward until the child meets the expectation. Now Rachelle receives one star for printing her whole name correctly. In managing the behavior of children in the classroom, the teacher's task is one of structuring the environment so that each child will learn to structure his own behavior within it. The goal is for every child to become a self-directed learner. How do children learn to be self-directed persons? This learning begins in early childhood when the child experiences success or other pleasant consequences when he behaves in an acceptable way. As he grows, the child also learns that external rewards are not always necessary to maintain his behavior. As he develops skills and competencies, he learns that behaving or acting on the environment is rewarding in and of itself. Children will spend long periods of time engaging in activities which are fun, exciting, challenging, or in other words, reinforcing to them. Certain tasks become intrinsically rewarding. Not all children have accomplished this learning by the time they come to school. If a child experiences physical, mental or environmental limitations, he may have difficulty directing his own behavior and in

meeting the expectations of the teacher. Such a child will need special help in the classroom. In any classroom you will find that individual students function at different levels.

Some will find academic tasks and classroom activities rewarding. They will perform these tasks for the sheer enjoyment of learning and feeling successful. As long as the teacher recognizes their capabilities and praises their efforts, such children will need little more in the way of rewards or incentives to perform. A few children will need systematic positive reinforcement in the form of continual teacher attention and support in order to maintain adequate classroom behavior. These children perform academic tasks to gain approval from the teacher.

Some children will be able to respond appropriately if the teacher structures their schedule so that they get frequent opportunities to engage in activities they enjoy. Still others will work for stars, checkmarks, or other tokens which give them immediate evidence of their progress. A few children need more tangible rewards such as trinkets, and toys, and some will respond best when rewarded with primary reinforcers such as food or touch.

In order to help the child learn to behave appropriately, the teacher must meet him at the level at which he is functioning, regardless of his age. Children are best reinforced with things that they enjoy or value and should be allowed some freedom to choose their own rewards. Even if the student is not yet performing as well as the teacher expects, he is entitled to reward and satisfaction for his attempts. Here the teacher praises Kathy for her attempts to get her sweater unbuttoned. Through the systematic rewarding of each progressive step, the teacher can help the child to move towards the goal of self-management.

V. Behavior Management in the Classroom

Once it has been determined that a goal of classroom learning is for students to become self-directed learners, where does the teacher begin? A first step is in creating a classroom atmosphere which is stimulating and fun--so much so that no student will want to be outside of it.

A second step is designing success-oriented experiences for every student. This means that each child must at first be given tasks which he can accomplish with a

reasonable amount of effort, and that he must immediately be given a reward for his accomplishment or attempt.

How can we discover what is rewarding or reinforcing for an individual student? What will work as a reinforcer depends on the type of student and upon his level of functioning. Children know best what is rewarding to them, and in their everyday actions children identify events and materials which they enjoy and value. By noting which events, materials, and activities are meaningful to individual students, the teacher gains access to a whole range of natural reinforcers--like bouncing a ball for these boys. Here are some more reinforcing activities which the children selected themselves. The clothes pins indicate how many children can participate in any activity at one time.

In order to get the system operating, the teacher must first carefully explain to the class that rewards will be given when task behavior is completed. A simple way to find out if a reinforcer is effective is to ask the child. Since it is often impossible to work with each student individually in the beginning, the teacher might start by teaching some ground rules for group behavior---for example, how to enter the classroom ready to begin work.

Rewards can be given to every student after each has lined up in a manner appropriate for entering the classroom after recess. On the first few days, rewards can be given to the class at regularly fixed intervals--say every 10-15 minutes if task behavior has been appropriate. Rewarding group behavior is an effective way to develop a basis for managing the behavior of individual students. When the teacher repeatedly rewards appropriate group behavior the children learn that the teacher is fair and consistent. They also learn that their behavior has predictable results. Every time an appropriate behavior is reinforced with a concrete reward, a social reinforcer such as a smile or word of praise from the teacher should be given.

The teacher can make contracts with individual students. The child is told that as soon as he has completed a specific amount of task behavior he can immediately engage in some activity which is reinforcing to him. The teacher might say, for example, "When you have solved 5 math problems correctly, you may spend 10 minutes in the science center." In the beginning, the teacher requires a rather small amount of task behavior before the reward is given. Gradually, the length, amount, or quality of task behavior is increased and the reward is designed to be

appropriate to the amount of task behavior. The teacher must be sure to design the contract so that performance rather than obedience is being reinforced. There will be times when even the most carefully planned student-teacher contract will fail. When this happens, the teacher should consider that the problem may be in the way the task was designed or presented to the student, or that the reward may not have been appealing to him. This means that the teacher should modify the task, or its requirement, present a new task, or an alternate reward, or change both the task and the reward. It is important to realize that the teacher and the child share the responsibility of fulfilling the contract. By altering the various components of the contract, the teacher will discover what works for an individual student.

In the world beyond the classroom we are not always rewarded immediately for our efforts. We have to wait for reinforcing events such as a coffee break or a vacation. Children need help in learning that reward is often delayed. One way of helping the child deal with this reality is to begin to replace immediate reinforcers with checkmarks, stars, or points for his acceptable performance. The checkmarks can then be saved in a folder on the desk to pay for reinforcing activities which can be enjoyed at a later time. At first, the student is required to save for only a short interval of time; then he can be required to wait a day, 2 days, or even a week for his reward. Some children, of course, are motivated to perform for the sake of earning checkmarks which are not backed up by concrete rewards. Throughout each stage the teacher gives praise and other forms of social approval for the child's accomplishment.

In this way praise and approval from the teacher and peers takes on a positive value for the child and becomes sufficiently powerful to maintain the child's behavior without additional reinforcement. As students continually receive rewards for their efforts, learning takes place and their academic skills increase. The student becomes more competent and confident and eventually may discover for himself that working or learning is rewarding. Children who understand this continually surprise their teachers by choosing activities which actually involve more work, rather than activities which the teacher might label as fun for children. When this begins to happen, the teacher can assume that the child has begun to master the essentials of self-directed behavior.

Materials in the folder should be colorful, exciting, and built around the child's interests. The materials may be teacher-made, or they may be drawn from texts and workbooks. A wide variety of media such as films, filmstrips, tapes, slides may be scheduled as can commercially prepared programmed instruction.

One advantage of the folder system is that the grade level of the material need not be evident to the child. This is an important factor in motivating children who have experienced repeated school failure.

Tasks should be short, clear, and concise, enabling the child to demonstrate his proficiency. Some children are encouraged to perform more adequately if they are presented with only a few lines or items per page of work. Tasks should be presented in steps so small that every child will succeed.

The teacher should require completion of the assignment sheet; if it seems too long, it may be necessary, on occasion, to modify it, and then require the child to finish the shorter version. Work which does not meet performance criteria should be done over by the student. This may be an indication to the teacher that the task is inappropriate for the child at the present time. Through checking the child's folder assignments, the teacher can assess the child's performance, and gain information which guides the planning of his assignments for the following day. Checkmarks may be given for completed assignments and are recorded on the child's checkmark card. The student can then make choices about what reinforcing object or activity he will use the earned checkmarks to "pay for."

Having shelves or boxes where instructional materials and worksheets are classified according to level of difficulty and subject area helps to simplify the daily preparation of the individual folders.

On the first few days when the folder is introduced, the assignment sheet should be very short--only a few lines. The length of the assignment sheet can be increased gradually. The child is free within limits, to choose the order in which he will complete the assignments planned for him. Such a system helps the child to move toward greater independence.

VI INDIVIDUALIZED INSTRUCTION

Appropriate selection and sequencing of instructional tasks and learning materials is essential to the productive use of behavior management principles. Since children learn at different rates, perform at different levels of competence, and have a variety of needs and interests, learning should be handled on an individual basis. Individualized instruction begins by identifying areas of needed instruction for each child. The teacher is then ready to list specific objectives and learning tasks appropriate to each area selected. These learning tasks are stated so that they describe what the child does, and what level of performance will be acceptable. Instructional materials should be selected and sequenced in such a way that they match the sequence of learning tasks designed for each child. For example, if the skills to be learned involve basic addition facts, either concrete materials or worksheet exercises may be chosen depending on the child's level.

For the teacher who has determined each student's learning needs, the folder system is an efficient method for organizing individualized instruction. A folder is prepared daily for each student, and contains a program or schedule of tasks for a portion of the day's activities. A selection of academic worksheets and other types of assignments is placed in the folder. Reading, arithmetic, phonics, perceptual training exercises, geography, and social studies are some of the subject matter areas which can be included in the folder. The schedule is designed so that the student gets a change of activity or a reward when he finishes a specific portion of the folder assignment. In other words, the teacher-student contracts are written into the schedule. Students working on their folders can raise their hands for teacher assistance or to ask the teacher to check their work before moving on to the next assignment.

Through directions to individual students written in the folder, the class can be programmed into group activities such as doing a puppet show, or working on an experiment in the Science Center. The child is not always required to work alone. The teacher can program in both social interaction and choice for students who are ready to handle this. For poor readers or non-readers, the assignment sheet can be color-coded to permit the children to follow the schedule with a minimum of teacher assistance.

APPENDIX IVa

IMCSE COMMUNICATOR ARTICLE

(Copy) IMCSE COMMUNICATOR

INSTRUCTIONAL MATERIALS CENTER SPECIAL EDUCATION

School of Education -- University of Southern California
1031 South Broadway
Vol. 1-No. 15 Los Angeles, California 90015

S O S F R O M I M C S E

To Teachers and Special Education Directors

A new project has been funded at IMCSE to produce an auto-instructional media package consisting of six sound filmstrips and a programmed guidebook. The filmstrips will demonstrate how to structure and create a stimulating classroom learning environment. Specifically, they will show how to create activity centers, select appropriate rewards, manage behavior and sequence materials. (The content outline of each filmstrip appears at the end of this article.)

We will soon be ready to begin the evaluation of the pilot version of the media package. You are invited to participate in this project in one of the following ways:

To Los Angeles and Orange Counties

(if you are outside of these counties, read on)

Teachers: A number of teachers presently teaching in a special education classroom in Los Angeles or Orange Counties will be selected to view the pilot filmstrips. If you are interested in making a personal visit to the center to spend some time viewing the filmstrips and making comments and suggestions regarding the content, please call us at the Center.

Special Education Directors: During the late Summer or early Fall, we will be offering inservice workshops on the material presented in the media package. We will need teacher groups of approximately 30 in number. One additional requirement is your willingness to allow us to make classroom visits to the teacher participants during May and June of this year. All costs for the workshops will be assumed by IMCSE. Call us if you would like to participate and we will be happy to supply further details.

To Total EMCSE Region

The final evaluation of this product will be conducted in counties throughout our three-state region. We anticipate that this will begin in the Spring of 1972. We again will be selecting individual teachers to participate and offering inservice workshops. If you feel that you may be interested at that time, we will be happy to hear from you by phone or letter now.

Filmstrip Content Outline:

Filmstrip 1--Introduction:

Provides overview or summary of the information presented in each of the other five filmstrips.

Filmstrip 2--Room Environment:

A classroom atmosphere which simulates the auditory and visual intensity of our complex, colorful and changing society is most likely to capture the interest and enthusiasm of students. Suggestions for setting up such an environment will be presented.

Filmstrip 3--Creating Activity Centers:

The purpose and content of activity centers, focusing on various subject matter areas, will be explored in this filmstrip. Centers provide a variety of activities selected in accordance with the interest and ability levels of the learners. The centers to be shown are: Achievement, Science, Activity-Games, Arts and Crafts, Audio-Visual, and Library-Study.

Filmstrip 4--Selection of Rewards:

The material presented in this filmstrip is based on the assumption that all behavior has a consequence. Since not all children find academic tasks rewarding, a hierarchy of rewards will be discussed and suggestions will be made as to how the teacher can select appropriate rewards for individual learners.

Filmstrip 5--Behavior Management:

Here the emphasis is on a success oriented classroom. Examples of how contracts may be initiated with the child are shown. The method of assigning "checkmarks" which may later be exchanged by the child for other rewards is demonstrated.

Filmstrip 6--Sequencing of Curriculum Materials:

If learning is to be efficient, instruction must be individualized. In this filmstrip, examples showing how a teacher may prepare daily sequences for each child in the class are presented. The filmstrip will show how to design a daily program and how to choose instructional materials.

APPENDIX IVb

PREVIEW EVALUATION SHEET

PREVIEW EVALUATION SHEET

Name of Filmstrip_____

A. As you view this filmstrip, please write down any of the concepts presented that were unclear to you and any questions you may have about implementing these ideas in your classroom.

B. As you examined the guidebook section for this filmstrip, which, if any, of the questions or unclear concepts you listed above were clarified?

C. Other reactions or suggestions regarding this filmstrip: (any additional concepts or ideas you thought of that were not included.)

APPENDIX V

PROGRAMMED EXERCISES

STRUCTURING THE CLASSROOM FOR SUCCESS

INTRODUCTION

Today's students are growing up in the midst of rapid change; they live in a world which is constantly expanding and where people are highly mobile. New media and communication techniques, ranging from Sesame Street to psychedelic art to meditation, have a significant impact on children's lives. These realities of life in the seventies require that schools also be dynamic and changing. Students are demanding excitement and current information.

Educational technology now includes "new kinds of lesson units which are not books, new kinds of materials centers which are not libraries in any traditional sense, new kinds of techniques to assess student progress." Such items are integral units in a system of individualized instruction - an approach which holds tremendous promise for educational improvement. These improvements alone are not enough to produce educational change. There is a growing concern with the tasks for teachers in the schools of tomorrow. The time-honored "teacher-taught" classroom model is no longer viable.

The presentation which you are about to see was designed to communicate to elementary school teachers, those who are experienced and those who are becoming, some ideas and skills for structuring their classrooms for successful learning.

[1] Gagné, R.M. Educational technology as technique. Educational Technology. 1968, 8 (21), p. 8.

Six units will be presented. The first provides an introduction, the second discusses classroom environment. In the third, some suggestions for creating activity centers are shown. Following are two sections on the application of behavior management principles, and finally, a unit on selecting and sequencing instructional materials. You will see children in both regular and special education classes in some semi-ancient and ultra-modern facilities. More importantly, you will see new possibilities and new ways of growth for both children and teachers.

STRUCTURING THE CLASSROOM FOR SUCCESS

OBJECTIVES

After viewing each slide-tape show and completing the tasks in each guidebook chapter, participants will be able to:

1) Draw a room plan for an elementary classroom including self-contained activity centers and an achievement core area.

2) Identify the characteristics of an effective classroom learning environment including:

   a) An "open" or "decentralized" classroom plan
   b) Conditions necessary for individualized instruction
   c) Rationale for establishing activity centers.

3) List characteristics or purposes for and content of each of the following centers:

   a) Achievement Center
   b) Library Center
   c) Activity Games Center
   d) Arts and Crafts Center
   e) Science Center
   f) Audio-Visual Center.

4) Identify the defining characteristics of behavior patterns and reinforcers.

5) Identify types of reinforcers including primary, tangible, token, social, intrinsic and "natural".

6) Identify appropriate selection and use of reinforcers in the classroom learning situation.

7) Identify the characteristics of a student-teacher contract and at least 3 ways that a contract may be modified.

8) Identify the sequence of steps involved in planning individualized instruction.

9) Identify statements which are written in behavioral terms.

10) Identify functions of a daily schedule and give examples of tasks which can be included in a child's folder.

Directions:

All of the main ideas from each slide-tape show have been broken down and further explained in each guidebook chapter. Respond actively as you read the material by filling in various key words and answers.

This is not a test, but a learning and reinforcing experience.

It is suggested that the answer column at the right of each page be covered or folded back so it is not in view.

Read each statement carefully. Write what you think belongs in each blank space. Then, at the end of the chapter, check your responses with the answers.

TT ROOM ENVIRONMENT

Classroom learning is more effective if it grows out of the interests of the students, and if the environment provides the learners with the maximum opportunity to make choices and decisions, to gather information, to examine alternatives and consequences. Each student should be free to learn as much as he can and should be encouraged to develop his own uniqueness. Traditional classrooms which tend to restrict movement and inhibit interaction can be restructured into learning communities where experimentation, the exchange of ideas, and the development of feeling and meaning are possible. The classroom atmosphere must _____ the excitement, variety and complexity of the real world if it is to capture the interests and meet the demands of today's students.

match

There is no single model for creating a successful learning environment; endless variations evolve out of the combined creativity of students and teachers. The teacher who is receptive to the ideas and experiences of children can help students plan a classroom which is productive for all. The total room arrangement should reflect:

a. Teaching style of the teacher
b. Interests of the students
c. Learning needs of the students
d. All of the above

d

Learning environments designed in this manner are sometimes called "open" or "decentralized" classrooms. Furniture arrangements are fluid; tables and chairs can be placed in small groups for seminars, or clustered together for cooperative planning projects or class discussions. Individual desks or tables are available for those who wish to be alone with their work. Open space elicits new responses from the teacher and from the students. The teacher's desk is no longer the focal point of the room; in fact, it may not be needed at all by the teacher who moves about the classroom participating in and guiding the diverse learning activities of the students.

Scheduling of learning activities is flexible; students are able to keep on with a project which holds their interest and are not restricted by rigid time limits. Special purpose areas can be designated around the room where messy or noisy activities can be isolated, or where students can retreat for a quiet period of reading, thinking, or listening. In these ways the classroom is made responsive to the _____ and _____ of the students in it.

needs
interests

In order to implement a system of individualized instruction, it is necessary to place in the classroom a wide variety of materials and activities from which the learners may select. Materials which appeal to all the sensory modalities: visual, auditory, tactual, kinesthetic, should be included so as to increase the child's opportunity to acquire the skills, attitudes, and knowledge he will need in the future. Children learn through touching, tasting, sharing, _____ and _____. Flexibility and novelty should be inherent in many activities. Children are curious about the phenomena of nature, the human body, machines and communication devices. The tools and elements for discovering and exploring these and the many other dimensions of the environment should be provided.

(seeing
(listening
(hearing

Learning should be spontaneous and personally relevant. Students learn from interacting with real objects and events such as planting seeds, and watching chicks hatch. Such activities give them practice in predicting and managing their _____, and the chance to arrive at their own conclusions. Through first-hand experiences in sewing, woodworking and following recipes, they learn, for example, the practical application of mathematics. The objects and questions which children bring to the classroom can give the teacher valuable insights as to how to expand the learning resources of the room. Children develop a feeling of participation and belonging when they see their work and their possessions displayed around the classroom. The materials available should always be related to the projects at hand. Placing too many materials around the room at one time may be confusing and may inhibit the novelty effect.

(environment
(world

Children learn in _____ ways; this means that a variety of methods and techniques are necessary. Group instruction should be used when it is the most efficient method for a particular purpose, never because it is simply expedient. Traditional classroom materials - the blackboard, textbooks and workbooks - can be supplemented with equipment such as the typewriter, overhead projector, tape recorder and camera. Thus the number of ways the student can record, express, and communicate his perceptions and interpretations of the environment is increased.

(different
(many
(individual

The open or _____classroom can be structured around several "centers"; this plan is possible in the self-contained classroom and also in team teaching situations. The core of the room might be an area called the "Achievement Center". Here children engage in individual _____tasks calling for the use of books and paper and pencil materials. In large classrooms, this area can also function as a study hall. In all classrooms peer tutoring situations can be arranged. In subjects such as math, spelling, phonics and reading where there is a need for drill or extended practice the teacher can plan exercises to be used with two or more students. Children can take turns acting as tutors. The tutor often gains as much as the child being tutored.

decentralized

academic

Surrounding the Achievement Center, several self-contained Learning Activity Centers can be set up. Some ideas for the focus of these centers were shown in the slides. Give three examples of Activity Centers:

_____

_____

_____

How suggest another name for each of these Centers:

Library_____ (Meditation Center (Quiet Zone

Science _____ Research Center

Activity-Games _____ Creativity Center

Arts and Crafts _____ "Do Your Own Thing" Center

Audio-Visual _____ Communication Center

Name Another Type of Center _____

_____

Each center contains a choice of meaningful activities and specific materials planned and selected to match the interests and ability levels of the learners. Sufficient instructions are given so that students can function effectively in the centers with a minimum of teacher supervision. This means that the teacher must be skillful in evaluating the characteristics of particular instructional materials. The teacher helps the students schedule their time spent in center activities so that no one area becomes so crowded or noisy that productive learning cannot take place. Freedom without clearly established guidelines may result in chaos; children need _____ telling them what behavior is expected of them, but they also need _____to learn to manage their own behavior. Rules, established together by teacher and students, are enforced by the teacher. The teacher must be able to clearly articulate the aims and objectives of classroom learning, and to establish performance criteria for individual students. The open classroom plan places the teacher in a new role. He may be seen as a resource person, or a facilitator of the learning process, rather than as a keeper of order and a dispenser of information. While more informal interaction is encouraged, planning and limit setting are not abandoned by the teacher; in fact, these activities become more essential than ever.

guidelines
freedom

Such a classroom is an exciting place to be; it is a place where learning is dynamic and visible - where learners are active - where positive consequences are the result of effort expended. An exciting classroom does not distract the learner if the tasks which are presented to him are as _____ as the room itself. People who are absorbed in what they are doing screen out extraneous sights and sounds.

(interesting
(challenging

When the environment is regarded as a partner in learning the students share in creating their own learning environment, and therefore are entitled to make _____ about how best to use it. They can experience meaningful interaction with other students, work alone, or with a small group. The teacher's responsibility is to assist and guide as the students learn how to learn. The system operates effectively only if the teacher trusts the students to make meaningful decisions about content, methods, and materials.

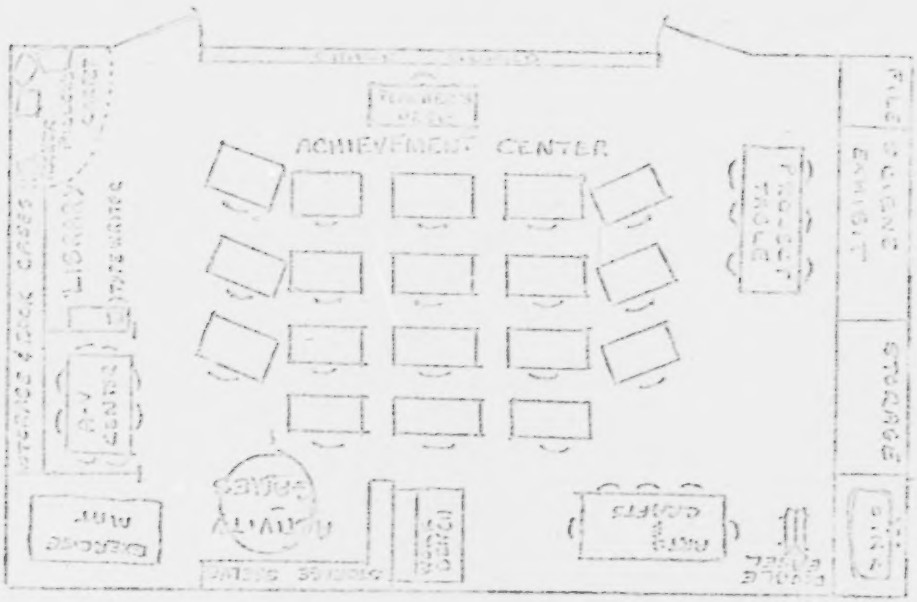
choices

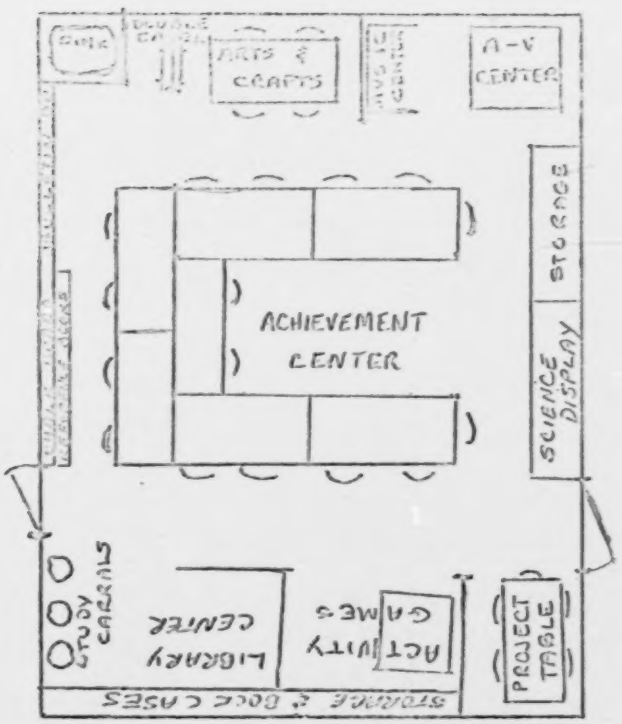
Instruction can be self-paced and _____. This is not a new idea in education, but it gains relevancy when it is recognized that the individual mode characterizes most of the learning which takes place in everyday life. Being stopped by the highway patrolman is an individual learning experience. Individualized instruction insures continuous progress for all students. The more able learners are not held back by the slower students in the class.

individualized

The open classroom presents a new challenge to both teacher and student. When the challenge is met, students develop new patterns of self-motivation; teachers grow and experience joy also.

SAMPLE ROOM PLANS





Individual Study Carrel

A 50 gallon fiberboard drum: Cut a groovy door in it, sit on a piece of scrap carpet or pillow, paint the outside the way you want it.

A place to sit and think, read a book, or be alone.

* Idea from Big Rock Candy Mountain - a learning to learn catalog, Portola Institute, 1970.

Another type of study carrel is this portable, lightweight & durable room divider (90" long x 46" high) by Learning Opportunities, P.O. Box 547, Visalia, California 93277. It can be folded flat for easy storing. Price is $5 each or $4.00 each for ten or more.

III CREATING ACTIVITY CENTERS

The creation of Activity Centers allows classroom space to be used flexibly and efficiently, and permits more meaningful contact between students and teacher. Such a structure ensures that learning activities determine the use of space rather than the space itself defining the program. Interesting task activities can be classified for individuals and for groups. The teacher can keep a large file of tasks, organized as to subject area and level of difficulty, to be given to students in the Achievement Center. Small groups can watch a filmstrip or work on a map project, while still other students are reading or working individually on a puzzle, for example. When _____ are completed, there are many rewarding activities to be enjoyed in the classroom.

assignments

The Achievement Center should be situated close to resource materials such as dictionaries, magazines, and reference books. The student is assigned individual academic tasks which he can complete on his own, but the teacher is available when help is needed, or when the student is ready to have his work checked. Each child working in the center should have a place to work and seats should be arranged so that the teacher can sit beside a child who needs assistance. The furniture can be _____ according to the needs of the children and the demands of the assigned tasks. The students should have a place to organize and store their work; shelves or boxes labeled with each child's name and placed near the center serve this purpose. Portable trays or folders can also be used. Children value their own possessions and products and need a place of their own for them in the classroom. The Achievement Center is usually the first area set up when a new classroom arrangement is begun and it is somewhat isolated from the rest of the classroom activities. All of the students share the _____ for maintaining the functional atmosphere of the Center, taking turns tidying up and arranging furniture.

(regrouped
(rearranged

responsibility

The Activity-Games Center is another area which might be set up in the classroom. The contents of this center may include teacher-made games as well as commercial games--Spill and Spell, Pick-up-Sticks, Monopoly, and Checkers, for instance. These are fun-type games which have academic value as well.

Game situations permit social interaction and cooperation. Through games the child develops the problem-solving skills of planning and working out strategies. Language games and games demanding some mathematical knowledge serve to reinforce previously learned skills and concepts. These learning games should be selectively introduced into the center by the teacher. Initially the Activity-Games Center should serve as a reward area where students can play when work is done. Suggest some other games which could be included in this Center:

_____

_____

_____

_____

Scrabble
Chess
Dominoes
Qubic
Clue
Bingo
Language Lotto

The Library Center might be located in a quiet corner of the room. Students can use this area for silent reading or studying. Magazines, newspapers, books, crossword puzzles, and dictionaries are available. A small carpet, cushions, or comfortable chairs create a relaxed atmosphere. Sometimes students use this center as a meditation place - a spot to go to reorganize their thoughts or a place to be alone. A 50 gallon fibreboard trash drum can be made into an individual study carrel by cutting out a door and placing a pillow or scrap of carpet on the floor (see diagram last page). The fibreboard insulates the student inside from the activity and bustle of the rest of the class. He can be alone with a book or his thoughts in this 'womb-within-the-room'. A typewriter and table can be made available so that students can prepare reports.

The purpose of the Science Center is to stimulate the student to _____various aspects of the physical and natural environment. Animals and fish, a rock collection, plants, science experiments, a magnifying glass, and measuring instruments could be included. Added to the list might be parts of broken machines, cars, TVs, radios, wire and batteries. When children are interested and motivated they are ready to understand concepts and processes that are highly complex and often amaze adults with their ingenuity. Projects and displays are _____frequently in accordance with the interests of the students.

explore

changed

Materials may be gathered from many different sources. In addition to the supplies available in the school district and the local pet store, teachers often find that factory discards provide interesting content material for the Science Center. The children themselves bring in items which they discover in the world around them and which they are curious about; the teacher can then direct the children to those resource materials which will help them learn more about their discoveries.

The Audio-Visual Center houses concept films, tapes, slides, filmstrips, records, a Language Master, overhead projector, and camera. Individualized language and speech lessons as well as geography and social studies exercises can be recorded on tape. Cassette tapes are easy to handle and can be used by students in a variety of ways to develop verbal and auditory skills. Tasks such as naming sounds, practicing short speeches and listening to stories are examples. Headsets permit several students to use the area at one time. Records and tapes ranging from Chopin to Chicago, from Beethoven to Blood, Sweat and Tears can be used to encourage enjoyment and appreciation of music. Polaroid cameras are simple to operate and can be used by children to document special classroom activities. Learning to operate and care for the audio-visual equipment provides an additional avenue for "skill" development.

In the Arts and Crafts Center materials such as paints, crayons, clay, wood, paste, nails, and tools are available. This might be a place where students prepare scenery and props for a class play, build a puppet theatre, or cooperate in designing a large mosaic. Butcher paper can be attached to the walls in the area. Activities which provide a considerable degree of inherent structure, such as stitchery, macrame, origami, paint by number, and models are balanced with those that allow free expression and _____. creativity
A costume box might inspire children into role-playing activities or even play-writing. Where appropriate, written and visual resources should be available to instruct the student in specific techniques.

The learning center arrangement is successful if teacher and student _____ in planning and setting it up, and in deciding on guidelines and rules for the use of materials and equipment. Providing tasks that are challenging and rewarding to students, and designing areas where students can work productively on their own allows the teacher more time to be with individual students who need advanced or remedial work. The center arrangement is an exciting and practical alternative to _____ instruction.

share

group

At first the use of the centers may have to be scheduled in each child's daily _____. Specific examples of how this can be done will be shown and discussed later. In addition, the teacher can devise a check-in/check-out board for each center to help in monitoring the number of people in each center at one time. A board with cup hooks or library book pockets and name tags can be used.

(program
(folder

At first the centers can be used as areas where students go after _____ tasks are completed and in this way they are seen as _____ activities. Later on as the students learn to operate more independently in the open classroom such a distinction is unnecessary. Students become able to sequence their own activities and to plan how to use their time efficiently. Creating Activity Centers whose contents are novel, fascinating and instructive is one way to make classroom learning relevant to today's students.

academic
reward

For review, match the name of each center listed below with the description of its function and purpose:

Matching Task

Center	Description
1. Achievement Center	a. Communication skills developed through films, slides, tapes, records.
2. Activity-Games Center	b. Functional atmosphere for completing academic tasks.
3. Library Center	c. Stimulates exploration of physical and natural environment.
4. Science Center	d. Structured activities balanced with those allowing free expression and creativity. Individual and group projects.
5. Audio-Visual Center	e. Develop problem solving skills, eye-hand coordination, strategies, social interaction skills.
6. Arts and Crafts Center	f. Quiet place for individual study and recreational reading.

1.b; 2.e; 3.f; 4.c; 5.a; 6.d.

SUGGESTED CONTENTS FOR ACTIVITY CENTERS

1) Not all materials should be present at once. Novelty and variety are necessities for an interesting classroom.

2) The materials noted here represent a variety of learning levels. A challenging classroom environment contains a wide range of materials for many levels.

3) Children may be encouraged to add to the centers from their own possessions and things that interest them.

ACTIVITY-GAMES CENTER

Games of Strategy:

- Checkers
- Chess
- Clue
- Monopoly
- Hi-Q
- 3-Dimensional Tic-Tac-Toe
- Battleship

Math Games:

- Playing Cards
- Kalah Math Game
- Krypto Math Game
- Flash Cards
- Dominoes
- Mille Borne
- Tuf-Game

Spelling and Word Games:

- Spill-n-Spell
- Anagrams
- Scrabble
- Language Lotto
- Phonics We Use

ARTS AND CRAFTS

Materials for the following activities can be included.

Painting and Drawing
- Paint
- Chalk
- Crayon
- Pencil
- Charcoal
- Finger Paint

Stitchery and Macramé
- Yarn
- Thread
- Cord
- Rope
- Cloth
- Patterns
- Beads

Clay

Collage and Paper Maché
- Paper (tissue, brown bags, paper towels)
- Old Magazines
- Paste
- Shellac

ACTIVITY-GAMES CENTER (Continued)

Gross-Motor, Perceptual-Motor, and Visual-Perceptual Skills Games:

- Jacks
- Pick-up Stix
- Pogo Stick
- Punching Bag
- Balance Beam
- Jig-Saw Puzzles
- Parquetry Blocks
- Colored Inch Cubes
- Design Cubes
- Peg Board Designs
- Building Blocks
- Dot-to-Dot

SCIENCE CENTER

- Microscope
- Magnifying Glass
- Magnets
- Weights and Measures
- Thermometer, Barometer
- Herb Garden
- Plants, Terrarium
- Aquarium
- Animals
- Shell and Rock Collection
- Battery and Wires for Electricity Experiments

ARTS AND CRAFTS (Continued)

Woodwork
- Tools--hammer, saw, drill
- Wood, Sandpaper, Shellac

Mosaics
Origami (Japanese paper folding)
Mobiles
Models

AUDIO-VISUAL CENTER

- Language Master
- Overhead Projector
- Films, Filmstrips, Slides & Projectors
- Cassette and Cassette Tapes
- Record Player and Records
- Camera

LIBRARY

Magazines:
- Time
- Life
- Sports Illustrated
- Reader's Digest
- Mad
- Road & Track
- Seventeen
- Highlights
- Comic Books
- Crossword Puzzles

Newspapers:
- Local News
- My Weekly Reader
- Christian Science Monitor

Dictionary
Encyclopedias
Recreational Reading Books

IV BEHAVIOR MANAGEMENT PRINCIPLES

Every interaction with the environment, and every encounter with the people in it, has a consequence for the individual and shapes his behavior in some way. This means that our actions have _____ and these consequences _____ our behavior.

consequences, shape

Behavior patterns are shaped through the results of our experience and practice in interacting with the environment. Changes in the environment itself or changes in the way we act upon it, or respond to it, can produce new behaviors. People perform certain actions because they have learned to behave that way, thus behavior patterns are _____, and can therefore be modified. Previously learned ways of behaving can be _____.

learned

changed, modified

Positive changes in behavior can be maintained when a person is rewarded for his behavior. _____ increase the chance that a person will continue to behave appropriately. Rewards follow behavior, or responses made by the individual, and serve to reinforce or strengthen these responses. Rewards are therefore often called _____.

Rewards

reinforcers

Reinforcers may be anything that is desired or needed by the individual. Some things which might serve as rewards are:

_____ _____

_____ _____

_____ _____

You might have listed:

PRIMARY REINFORCERS

food
touch

TANGIBLE REINFORCERS

trinkets
toys
prizes

TOKEN REINFORCERS

stars
checkmarks
Blue Chip stamps
money

SOCIAL REINFORCERS

praise
approval
special privileges
grades

Every time you give someone something concrete, assign him a grade, praise him, answer his questions, smile at him, scold, or even ignore him, you are _____ the way he is behaving at that time.

reinforcing

Sometimes we unintentionally reinforce inappropriate behavior. Smiling, nodding and saying "um hm" or laughing at the "loudmouth" clown is sufficient to reward this individual and to perpetuate his annoying behavior.

In other words, _____behavior develops and is maintained in the same manner as _____ behavior through reinforcement. If we want to make the most effective and positive use of behavior management techniques, we must know what behavior we are rewarding. In the classroom we want to reinforce children for behaviors we have selected as being appropriate.

inappropriate,
appropriate

The real power of the reinforcement approach lies not in the rewards we give, but in when we give them. Rewarding haphazardly or unsystematically, has only a temporary effect on behavior. If rewards are to be effective in changing behavior they must be given on a _____basis.

systematic

In the visual presentation which you saw, Rochelle was learning to write her name; at first the teacher rewarded her with a star for each letter printed_____. The teacher's objective was for Rochelle to print her name. Instead of waiting until the child printed her entire name correctly, the teacher at once rewarded her initial attempt by placing a colored star over each correct letter. This illustrates that each small step or improvement the child makes should be rewarded _____.

correctly

Immediately

Giving rewards immediately helps the child to see the relationship between his correct responses and desirable consequences. For some children seeing the correct response on the paper is adequate reinforcement; however, in learning new behaviors rewards should be given very _____ or the correct response will be forgotten. Incorrect responses which are not reinforced will also tend to be _____.

often

forgotten

In managing the behavior of children in the classroom, the teacher's task is one of structuring the environment so that each child will learn to _____his own behavior within it.

(structure
(manage
(direct

Learning to direct one's own behavior begins in early childhood. When the child takes his first steps he usually receives encouragement and praise from his parents. He also finds his walking behavior self-rewarding since when he develops this skill he gains some control over his world. As he grows and develops other skills and competencies, he learns that behaving or acting on the environment is _____in and of itself.

rewarding

Some children spend long periods of time building sandcastles, looking at magazines, reading comic books, riding their bicycles and playing games. Certain activities become intrinsically rewarding. This means that _____rewards are not always necessary.

(extrinsic
(external

Not all children have learned this by the time they come to school, and so will require special help in the classroom. In any classroom you will find that individual students function at different levels. Some will find academic tasks and classroom activities rewarding. They will perform these tasks for the sheer enjoyment of _____and feeling successful. The teacher can maintain their behavior by continuing to present _____ tasks, and by offering occasional words of praise or special privileges.

learning

(exciting
(challenging
(interesting

A few children will need continued systematic positive reinforcement in the form of teacher attention and support in order to maintain adequate classroom behavior. These children perform academic tasks to gain _____from the teacher.

(attention
(approval

Some children will be able to respond appropriately if the teacher plans their daily schedule so that they get frequent opportunities to engage in activities they _____when their work is done. Still others will work for stars, checkmarks or other _____reinforcers which give them immediate evidence of their progress.

(like
(enjoy
(want

token

A few children respond to rewards such as trinkets and toys which are called _____reinforcers, and some will learn best when rewarded with primary reinforcers such as _____or touch. In order to help the child learn to behave appropriately, the teacher must meet him at which he is functioning regardless of his age.

tangible

food

Children are best reinforced with things that they enjoy or value, and they should be allowed some freedom to _____ their own reinforcers. Even if the student is not yet performing at criterion level for a particular task, he is entitled to reward and satisfaction for his_____.

(select
(choose

efforts

Through the systematic application of this principle, the teacher can help the child to progress toward the goal of self-management.

V BEHAVIOR MANAGEMENT IN THE CLASSROOM

One goal of classroom learning is self-management. Successful students are _____learners. A first step toward achieving this goal is to create a classroom environment which is _____ and fun--so much so that no child will want to be outside of it. A second step is designing success-oriented experiences for each individual. Every child must be given tasks which he can accomplish with a reasonable amount of effort, and must be given a _____ for accomplishment or attempt.

self-directed

(stimulating
(exciting
(interesting

(reward
(reinforcer

You have already learned that there is a classification of rewards ranging from primary to _____, or secondary reinforcers. What will work best as a reinforcer depends on the type of student and upon his level of functioning. Children know best what is rewarding to them. Allowing the child to make his own choice of reward is important. For example, recess may be a task for some children though it is a reward for most. If a child has difficulty making choices and decisions, the teacher should present a limited selection of alternatives. "Would you like to use the typewriter, or paint a picture?", for example.

social

By noting what materials and activities children choose in their free time around the classroom, the teacher finds out what will be effective as reinforcers for each child. Then the teacher can begin a behavior management program at a guaranteed success level. These self-chosen activities are often called "natural" reinforcers because they are things that are naturally available in the environment. This means that in the classroom rewards can be anything that is acceptable to do in school and which does not infringe on the rights or privacy of others. Two examples of natural reinforcers in the classroom are talking to classmates, and painting a picture. In the space below list some other natural reinforcers available in the classroom which you feel might appeal to children.

_____ _____

_____ _____

_____ _____

_____ _____

You might have included in your list activities such as the following:

NATURAL REINFORCERS

1. Listening to records
2. Playing checkers
3. Watching a filmstrip
4. Handling the animals
5. Playing a musical instrument
6. Drawing on the blackboard
7. Daydreaming or looking out the window
8. Helping the teacher
9. Reading stories
10. Playing games

When in doubt about what is reinforcing ask the _____. (child (children

Since it is often impossible to work with each student individually in the beginning, the teacher might begin to apply behavior management techniques with the class as a group. You could start with helping the students learn a few rules which will enable the group to work cooperatively and harmoniously together. First, the teacher explains carefully to the class that rewards will be given when certain behaviors or _____ have been performed correctly. In the slides you saw an example of students learning to line up appropriately for entering the classroom and the teacher reinforcing this behavior. The teacher might also plan to reinforce individual behaviors which contribute to pleasant classroom conditions. Taking turns, raising hand to speak in discussions, and getting to work when a task is assigned are examples. tasks

On the first few days, rewards can be given at regular time intervals such as every ten to fifteen minutes. The teacher might assign academic tasks to a group of students and when each student finishes, check his work. If the assignment has been _____ successfully, the teacher can then allow him to go to a reward area for ten minutes. At the end of the ten minutes, a signal can be given to tell the children to return to their seats. (completed (finished

When the teacher repeatedly rewards appropriate group behavior, the children learn that the teacher is fair and _____. They also learn that behavior has predictable _____. Every time an appropriate behavior is reinforced with a concrete reinforcer, a _____ reinforcer such as a smile or word of praise should be given. In this way praise and approval from the teacher takes on a positive value for the child, gradually making concrete reinforcers unnecessary. (consistent (systematic (consequences (results social

Managing group behavior in the classroom provides the teacher with a basis for helping individual students to manage their own behavior. The teacher can start by making contracts with individual students. In arranging the _____ the child is told that as soon as he has completed a specific amount of _____, he can immediately engage in some activity which is reinforcing to him. The terms of the contract between teacher and student might be stated, "When you have completed one page of phonics exercises, you may spend ten minutes in the Arts and Crafts Center."

contract

task behavior

In the beginning, the teacher requires a rather _____ amount of task behavior before the reward is given. Gradually, the length, amount, or quality of task behavior is _____, and the reward is designed to be appropriate to the task. One half hour of play time would be an inappropriate reward for a child who has completed only one worksheet. The type, quality or amount of reward can be changed. Once learning begins, reward may be delayed for _____ intervals of time. The teacher must be sure that the contract is worded in such a way that it is clear to the child that performance, rather than obedience is being reinforced. In other words the reward is given because the child has _____ some task, rather than because he has done what the teacher asked him to do. Rewarding the child for his accomplishment helps him to become an independent learner; rewarding him for obedience only encourages continued dependence on the teacher.

small

increased

(longer
(greater

(performed
(completed
(attempted

Sometimes even the most carefully planned student-teacher contracts will fail; the child cannot, will not, or does not do the work. When this happens the teacher should first consider that the problem may be in the way the _____was designed or presented to the student. Perhaps the directions were unclear or the task was too long or too difficult--or all three. The difficulty might be in the _____; it might not have been sufficiently motivating to the child or the child might have found a way to obtain the reward outside the terms of the contract. The teacher will then have to _____the task or its requirement, present a new task or alternate reward. Occasionally all that is necessary is to verbally reaffirm the contract with the student.

task

reward

(change
(modify

It is important to realize that the responsibility of fulfilling the contract is shared by the _____and student. By altering the components or requirements of the contract, the teacher can discover what will motivate the student and enable him to perform successfully.

teacher

Outside the classroom and in adult life, people are not always rewarded _____ for their efforts. We have to wait for our pay checks, or days off. Children often need help in learning that rewards are frequently delayed. Once the child is responding to immediate concrete or tangible reinforcement in acquiring new academic and social behaviors, the teacher can begin a token reinforcement system. Stars, points or _____ can be awarded for acceptable performance. Such tokens can then be saved on a work record card or chart, kept on the child's desk. It takes only a few minutes to check each child's work. And this is an excellent way of making frequent progress checks on the child's performance. With older or more capable children, self-checking is sometimes permitted. When a specified number of checkmarks or points have been accumulated over a period of time, the child can exchange them for reinforcing activities or objects of his choice. Ten checkmarks might earn five minutes at the record player, for example; or three weeks of checkmarks might earn the child a "free" day in the classroom.

immediately

checkmarks

At first the student should be required to save tokens for only a _____ interval of time, like during one morning. Then he can be required to wait all day, for two days, a week, or even longer for his reward. Some children actually work for stars or checkmarks alone and do not require concrete or tangible reinforcers. Throughout each phase of the behavior _____ program the teacher gives praise and other forms of social approval. As the child progresses, his peers also become important sources of social recognition and therefore may serve to motivate his behavior.

short

management

Successful learning brings increased confidence and greater academic competence. Through _____ experiences the student eventually may discover that working or learning is rewarding. Solving a math problem or sounding out a new word can be exciting. Children who receive this kind of _____ reinforcement continually amaze their teacher by choosing as rewards activities which actually involve more work. Some children choose to read a book or do a science project as a reward. Such behavior suggests to the teacher that the child has found joy in learning and has begun to master the essentials of self-management.

(success
(successful

intrinsic

VI SELECTING AND SEQUENCING INSTRUCTIONAL MATERIALS

Learning should be handled on an individual basis because

a. Children learn at different rates
b. Children perform at different levels of competence
c. Children's interests and needs vary
d. All of the above — d

Information on the child gained by the teacher through careful observation and sometimes through psychological reports, can be used to identify each child's academic level and instructional needs. Instructional needs become the basis for forming goals for the child. Instructional goals are things like Good Citizenship, Reading on Grade Level, and Understanding Addition and Subtraction Processes. Listening and Attending in class can also be an _____ _____ for a particular child. — instructional goal

Once instructional needs or _____ have been established for each child, objectives and tasks must be devised to enable the child to progress toward the goal. _____ and _____ are stated in specific terms so that they describe what steps the child will take. Learning tasks are expressed in action words or verbs which are observable behaviors such as "writes", "says" or "states", "matches", "moves", "sits down", etc. "The child _____his name correctly" is an example of a _____ _____. A behavioral objective related to the goal of "Good Citizenship" can be "the child _____in his chair for five minutes". A behavioral objective for "Reading on Grade Level" can be "the child _____ aloud 2 pages in X Reader with less than 5 missed words". A behavioral objective for Recognizing Numbers could be "the child _____numbers from 1 to 10" or "the child _____the numbers from 1 to 10". — goals; Objectives; tasks; writes; behavioral; objective; sits; reads; writes; names

Performance Criteria are also built into specific objectives and tasks. A Performance _____ indicates what level of performance is acceptable; for example, how much work must be done, for how long, and what percentage must be correct. In the objective "pupil names all numerals from 1 to 10 correctly within 10 seconds" "correctly within 10 seconds" is the _____ _____. It states that all numerals must be named with no errors (percentage correct) and within 10 seconds (time limits). In the statement "pupil reads 2 pages in X Reader with less than 5 words missed", the performance criteria is:_____ _____.

Criterion

performance criterion

2 pages with less than 5 errors

The specific behavior expected and what level of performance will be accepted must be communicated to the child by the teacher. That way, the child knows what is expected of him, and the teacher will know if the child has performed adequately at the end of the task. Behavioral objectives with _____ _____ enable the teacher to compare the child's progress and improvement with his own past performance rather than with that of the rest of the group.

performance criteria

Materials selected for the child should match the task. It is inappropriate to give a child who is unable to perform simple addition facts a mimeographed page listing 20 addition problems. Some concrete materials which might be chosen for this particular child instead are:

a. Counting Blocks (abacus
b. (number line
c. (cuisenaire rods

For the child who is learning to write his name, the teacher might select:

a. A tracing exercise over his preprinted name (sandpaper letters
b. (wood-burned letters
c. (copying name on blackboard

An individualized folder for each child contains:

a. Schedule of daily activities
b. Task sheets
c. Both

c

The schedule lists the worksheets in the folder to be completed and also provides time for choice of reward when a certain amount of work has been completed. The assignment sheet or _____ may also indicate times when the child is to go to the teacher for individual work or for group activity to enable the teacher to introduce a new concept. Schedules of academic assignments do not have to change from day to day for each child; different worksheets are presented daily but the subject areas remain more fixed.

schedule

Teacher-student contracts are reflected in the assignment schedule. These _____must be explicit so that both the student and the teacher know what is expected. The folder system is the vehicle through which contracts for specific amounts of _____and specific amounts of _____time are agreed upon by the teacher and student.

contracts
work tasks
reward

Via the types of assignments programmed into the folder, the child may participate in _____activities and _____ activities. Some examples of individualized academic task activities which can be included in the folder are:

group
individual

_____ _____ (reading
_____ _____ (phonics
_____ _____ (perceptual training
_____ _____ (social studies
(spelling

Some examples of group activities which may be programmed into the folder are:

_____ _____ (movies or film-strips
_____ _____ (making a mural
_____ _____ (arranging a bulletin board display
_____ _____ (tape recorded lessons
(spelling contests
(discussing world events

Worksheets may or may not be done in any special sequence. If a specific sequence is desired they can be numbered to match the assignment schedule.

The materials in the folder may be teacher-made dittos or worksheets torn out of various commercially made workbooks in order to camouflage _____ _____. Acetate overlays can be used for those children who need repeated practice on one exercise or so that worksheets may be re-used at a later time.

grade level

Tasks included in the folder should be exciting and of high interest to the child as opposed to traditional drill. Treasure hunts, secret codes and puzzles are examples of activities which may have academic value and often achieve the same purpose as _____.

drill

Tasks should be short, clear and concise. Tasks should progress in small steps rather than big jumps toward the end goal. _____steps help insure success for the child and also success for the teacher when she learns to be satisfied with a little bit of progress rather than always expecting "the big leap". The child is more likely to succeed and the teacher more likely to be reinforced if tasks are designed to be _____ and _____.

Small

(clear
(short
(concise

Checkmarks may be given to each child for completed assignments in the folder. Upon completion of a certain amount of work, the teacher _____the work and the checkmark is recorded on a work record card at the child's desk. The child can use these checkmarks to obtain _____ activities or objects of his choice.

checks

reinforcing

Checking off a child's work at regular intervals during the day allows the teacher and child

a. Immediate feedback and appraisal of progress
b. Increased awareness of expectation levels
c. Regular teacher-child contact
d. All of the above

d

In addition to systematic feedback on progress and awareness of performance expectations, the checking system provides for a variety of daily personal contacts between teacher and each student.

Checking a child's work immediately upon completion eliminates much of the after-school "grading" of papers and frees the teacher to gather worksheets for the next day's folders assignments. Teacher aides can assist in the preparation of the folders.

At first the folder can be used diagnostically and include simple worksheets designed to provide the teacher with information on the child's level and needs. Easy tasks with guaranteed _____ success should also be included until the children become accustomed to the format and routine. When the _____is established routine academic difficulty may be gradually increased or worksheets designed to strengthen skill deficiencies included. If learning tasks and materials are carefully sequenced and structured, children can assume more and more responsibility for programming their own learning activities.

Structuring the Classroom for Success
Resource List

Room Environment and Activity Centers:

1) Bostwick, Prudence, "Inventiveness with Time, Space and Materials," Chapter 6 in Miel, Alice (Ed.), Creativity in Teaching. Belmont, California: Wadsworth Publishing Co., Inc., 1961.

   Takes a creative approach to the use of time, space and materials as resources to build an "atmosphere that nourishes the spirit of inquiry and supports the willingness of teacher and child to undergo the struggle for thought and discovery." (P. 176) Not available in IMCSE library at this time.

2) DeBernardis, Amo, The Use of Instructional Materials. New York: Appleton-Century-Crofts, Inc., 1960. IMCSE #8517G.

   Book discusses selection and classroom use of printed, visual and auditory instructional materials as well as community resources. Bibliography and appendix tells reader where to write for further information and specific products for all media discussed.

3) Hewett, Frank M., The Emotionally Disturbed Child in the Classroom. Boston: Allyn and Bacon, Inc., 1968. IMCSE #6535.

   A developmental strategy for educating children with maladaptive behavior includes a section on the design of an "engineered classroom", scheduling daily activities around reward and achievement centers, and specific curriculum suggestions.

4) Kohl, Herbert, The Open Classroom. New York: Vintage Books (Random House), 1969. Available in paperback, $1.65.

   A practical guide to a new way of teaching. Emphasizes value of classroom learning atmosphere that is more loosely structured and flexible in time and space.

5) Pearce, Lucia, "Environmental Structure: A Third Partner in Education," Educational Technology, September 15, 1968, 8 (17), 11-14.

   Article discusses effects of the classroom environment on learning.

6) Valett, Robert E., Programming Learning Disabilities. Palo Alto, California: Fearon Publishers, 1969.

Basically a book on diagnostic and prescriptive teaching techniques for learning disabilities, it includes sections on Classroom Organization, Materials and Equipment. Diagram of suggested room arrangement and an extensive list of instructional materials organized according to subject area are included.

7) Bibliography on Instructional Materials--Elementary Level. Available from IMCSE Librarian.

Behavior Management:

1) Becker, W.C., Englemann, S., and Thomas, D.R., Teaching: A Basic Course in Applied Psychology. Champaign, Illinois: Englemann-Becker Corp., 1970. Part I: Behavior Modification, Strengthening, Weakening and Maintaining Behavior. Part II: Concepts and Operations--Teaching the General Case.

In programmed format, comes complete with exercise booklets.

2) Becker, Wesley C., Parents and Teachers - A Child Management Program. Champaign, Illinois: Research Press Co., 1971.

Detailed account of all elements of behavior management. Includes many practical examples of the use of this system in the home and classroom.

3) Homme, Lloyd, How to Use Contingency Contracting in the Classroom, Champaign, Illinois: Research Press Co., 1969, IMCSE #C042.

Explains use of contingency contracting (also known as Grandma's Law) as a unique behavior management system in the classroom. Discusses rewards, preparation of materials, classroom organization, etc.

4) Patterson, Gerald R., and Gullion, M. Elizabeth, Living With Children, Champaign, Illinois: Research Press Co., 1968, IMCSE #6720.

Programmed book discusses basic behavior modification procedures, specifically for changing undesirable behavior in children.

Sequencing Materials:

1) Deterline, William A., "The Secrets We Keep From Children", Educational Technology, February 15, 1968, 8, 7-10.

Short article stresses the importance of instructional objectives for good teaching and good learning.

2) Mager, Robert, Preparing Instructional Objectives. Palo Alto: Fearon Publishers, 1962, IMCSE #1200.

Outlines in detail the development and use of instructional objectives in teaching. Informally written, in programmed format.

3) Special Education Curriculum Development Center, Instructional Objectives: Developing Teaching Strategies for the Mentally Retarded. A cooperative program involving the Iowa State Department of Public Instruction and the University of Iowa, 1970. IMCSE #0199.

Booklet designed to help teacher to recognize, write and employ instructional objectives for individualized instruction of the retarded. Applies technique with both commercial and teacher-developed materials.

APPENDIX VI

PRE AND POSTTEST

Name_____

STRUCTURING THE CLASSROOM FOR SUCCESS:
PRE/POST-EVALUATION SURVEY

1) In the space below sketch a simple room plan for an elementary level classroom. Take about 5 minutes for this task, then go on to the next page.

TAKE ABOUT 20-25 MINUTES TO COMPLETE THE FOLLOWING ITEMS. PLEASE ATTEMPT EVERY ITEM. IN THE MULTIPLE CHOICE QUESTIONS YOU MAY MARK ANY OR ALL OF THE ALTERNATIVES. ON THE OPEN-ENDED QUESTIONS, LIST AS MANY RESPONSES AS YOU CAN, BUT DO NOT SPEND SO MUCH TIME THAT YOU CAN'T ATTEND TO ALL ITEMS.

2) An effective classroom learning environment:

a) Grows out of the interests of the students
b) Is based on group instruction
c) Matches the excitement and variety of the world outside
d) Gives learners the opportunity to make choices and decisions
e) Is responsive to the learning needs of the students.

3) An "open" or "decentralized" classroom is characterized by:

a) Flexible scheduling of learning activities
b) Self-directed instruction
c) Unrestricted freedom for students
d) A quiet atmosphere and a tidy appearance
e) Choice of seats for students and teacher.

4) Structuring the classroom for individualized instruction requires:

a) A variety of resources for acquiring information and skills
b) That students be permitted to make choices about what and how they will learn
c) A sufficient number of texts and workbooks for each student
d) Instructional materials which appeal to all sensory modalities
e) A large classroom, a small number of students and a teacher aide.

5) A classroom organized around Activity Centers:

a) Contains several self-contained learning centers
b) Usually has a core area called the Achievement Center
c) Allows students to engage in fun activities when tasks are completed
d) Provides opportunities for students to work in small groups
e) Makes it more difficult for the teacher to manage the behavior of the class.

6) List some characteristics or functions of the Achievement Center:

_____

_____

_____

_____

_____

7) List some purposes served by a Library Center in the classroom:

8) List some purposes served by an Activity-Games Center in the classroom:

9) List some activities which could be included in an Arts and Crafts Center:

10) Suggest some sources for obtaining materials to place in a Science Center:

11) List some materials and equipment which could be housed in an Audio-Visual Center:

_____

_____

_____

_____

_____

12) In humans, most behavior patterns are:

a) Unchangeable
b) Inherited
c) Learned
d) Random

13) Reinforcers:

a) Strengthen responses
b) Can promote positive changes in behavior
c) Can promote negative changes in behavior
d) Are sometimes called rewards
e) Can be anything desired or needed by the individual.

14) In teaching new skills, reinforcers should be given:

a) For each small step or improvement
b) Only when the student has mastered the skill
c) Systematically
d) Immediately.

15) The best potential reinforcer for a child is:

a) Something nice or happy selected by the teacher
b) Food
c) Something the child chooses to do or have
d) Good grades.

16) Match the type of learner described on the left with the most appropriate reward:

a) Finds learning rewarding in itself	1) trinkets, toys
b) Is best reinforced with primary reinforcers	2) checkmarks, stars
c) Responds to a token reinforcement schedule	3) teacher attention, praise
d) Finds social reinforcement meaningful	4) challenging tasks and activities
	5) food, touch

a)
b)
c)
d)

17) List some "natural" reinforcers found in the classroom:

_____

_____

_____

_____

_____

18) When managing the behavior of the class as a group the teacher should:

a) Give reinforcement systematically
b) Require appropriate behavior before reinforcement is given
c) Explain the system to the class
d) Pair concrete reinforcement with social reinforcers.

19) A student-teacher contract:

a) Specifies a relationship between a task and a reward
b) Is designed to reinforce performance rather than obedience
c) Is the responsibility of the teacher
d) Should be the same for all students.

20) If the student-teacher contract is not fulfilled, it is desirable for the teacher to:

a) Change the task requirement or instructions
b) Offer an alternate reward
c) Delay the reward
d) Design a new task
e) Change both the task and the reward.

21) To help the student learn to cope with delayed reward the teacher can:

a) Give the student more difficult tasks
b) Give rewards every Friday
c) Begin a token reinforcement system
d) Require the child to save checkmarks over a period of time.

22) Once an instructional need has been identified for an individual student, the <u>next</u> step is to:

a) Choose the materials best suited to teach the skill
b) Specify what the student will be able to do at the end of instruction
c) State your goal for the child
d) Choose a teaching method which will meet the needs of the child.

23) In the list below, mark the phrases which are stated in specific behavioral terms:

a) Learns initial consonants
b) Understands the calendar
c) Names five parts of the body
d) Attends to school tasks
e) Writes his name.

24) A student's daily schedule:

a) Programs the student into group activities
b) Provides for change of activity and reward
c) Can be color-coded for non-readers
d) Is used only for sequencing academic tasks
e) Is included in his work folder.

25) Give some examples of tasks which can be programmed in the child's daily folder:

_____

_____

_____

_____

_____

APPENDIX VII

PRE AND POSTTEST SCORING CRITERIA

Item	Criteria	Total Points Possible
1.	+1 for Achievement Center and +1 for each other center to maximum of 5.	6
2.	+1 for each correct choice (a,c,d,e); deduct 1 for incorrect choice.	4
3.	+1 for each correct choice (a,b,e); deduct 1 for each incorrect choice.	3
4.	+1 for each correct choice (a,b,d); deduct 1 for each incorrect choice	3
5.	+1 for each correct choice (a,b,c,d); deduct 1 for each incorrect choice.	4
6.	+1 for each point to maximum of 5: core of the room; individual academic tasks; study hall; peer tutoring; close to resource materials; each child has place to work independently; furniture can be regrouped to suit tasks; place to organize and store work; usually the first area set up; somewhat isolated from rest of room; informal testing.	5
7.	+1 for each point to maximum of 5: silent reading; studying; relaxed atmosphere; thinking, meditation; a place to be alone; prepare reports; independent research; develop reading skills; enrichment for gifted; learn library skills; develop new areas of interest; no need to wait for special library day.	5
8.	+1 for each point to maximum of 5: place for fun games; learning games; social interaction and cooperation; develop problem-solving skills; reinforce previously learned concepts; reward area; develop visual perception skills; learning rules; reading readiness skills; free time activity; develop ability to make choices; uses energy.	5

Item	Criteria	Total Points Possible
9.	+1 for each point to maximum of 5: I - painting, crayons, paints II - modeling III - yarn, stitchery, weaving IV - construction, woodwork Costume-making; leather; scenery; candles; baking and cooking; ceramics; macrame; kites; photography; decoupage; mosaics; collage; student newspaper.	5
10.	+1 for each point to maximum of 5: school district; pet store; parents, friends; other teachers; natural environment; dump, trash; factories; library; IMCSE; fieldtrips; labs; government agencies; high school discards; class projects; Humane Society; Forest Ranger.	5
11.	+1 for each point to maximum of 5: I - films, filmstrips, slides; appropriate hardware II - tapes, records; appropriate hardware Language Master; overhead projector; cameras; teaching machines; earphones; listening posts; posters; pictures; books; flannelgraph; radio.	5
12.	+2 for c; if more than 1 choice is marked, score 0.	2
13.	+1 for each correct choice (a,b,c,d,e).	5
14.	+1 for each correct choice (a,c,d); deduct 1 for each incorrect choice.	3
15.	+2 for correct choice (c); if more than one choice is marked, score 0.	2
16.	+1 for each correct response; a-4; b-5; c-2; d-3.	4

Item	Criteria	Total Points Possible
17.	+1 for each point to maximum of 5: listening to records; playing games; watching films; playing instruments; playing with animals; day-dreaming; feeling of accomplishment, satisfaction; draw on blackboard; help teacher or other student; read stories; play outside; time in activity center; tutor another child.	5
18.	+1 for each correct choice (a,b,c,d).	4
19.	+1 for each correct choice (a,b); deduct 1 for each incorrect choice.	2
20.	+1 for each correct choice (a,b,d,e); deduct 1 for each incorrect choice.	4
21.	+1 for each correct choice (c,d); deduct 1 for each incorrect choice.	2
22.	+1 for each correct choice (b); if more than one choice is marked, score 0.	1
23.	+1 for each correct choice (c,e); deduct 1 for each incorrect choice.	2
24.	+1 for each correct choice (a,b,c,e); deduct 1 for each incorrect choice.	4
25.	1 point for each academic task or group activity appropriate, to maximum of 5.	5
	TOTAL	95

APPENDIX VIII

IMPLEMENTATION CHECKLIST

IMPLEMENTATION CHECKLIST

DATE OF OBSERVATION_____
TIME OF OBSERVATION_____

NAME OF OBSERVER _____

NAME OF TEACHER_____

NAME OF SCHOOL_____

GRADE LEVEL_____SPECIAL EDUCATION CLASSIFICATION_____

IS A TEACHER AIDE ASSIGNED TO THIS CLASS?_____

1. ROOM ARRANGEMENT:

   a. Furniture is arranged for use by:

      ( )total group only
      ( )small groups
      ( )large groups
      ( )individuals

   DRAW A QUICK SKETCH OF FURNITURE ARRANGEMENT:

   b. Activity Centers:

      ( )LIBRARY
      ____Books (10 or more different)
      ____Other Reading Material
      _____
      _____
      _____

      ( )ACTIVITY-GAMES
      (List 3 items present)
      _____
      _____
      _____

      ( )AUDIO-VISUAL
      (List 2 items of equipment)
      _____
      _____

      ( )ARTS & CRAFTS
      (List 2 activities present)
      _____
      _____

      ( )SCIENCE
      (List at least 1 item present)
      _____
      _____

      ( )OTHER_____
      (List 2 items present)
      _____
      _____

      ( )OTHER_____
      _____
      _____

   c. Children use Activity Centers <u>without</u> direct teacher supervision

      ( )YES ( )NO

2. Room Environment

Objects NOT typical of classroom equipment:

( ) Easy Chair
( ) Lamp
( ) Area Rugs
( ) Individual Study Carrels
( ) Cushions
( ) Posters
( ) Mobiles
( ) Other_____
( ) Other_____
( ) Other_____

Comments:_____

_____

3. Rewards

a. Individual children rewarded for academic behaviors ( ) Yes ( ) No

b. Individual children rewarded for social behaviors ( ) Yes ( ) No

c. Teacher rewards appropriate group behavior ( ) Yes ( ) No

Comments:_____

_____

d. Types of Rewards:	Available	Used during observation
( ) Food	( ) Touch	
( ) Checkmarks	( ) Stars	( ) Tokens
( ) Praise, Smile		
( ) Activities, Priveleges	( ) Free Time	
( ) Tangibles		

Comments:_____

_____

e. Kids have opportunity to choose type of reward ( ) Yes ( ) No

Comments:_____

_____

f. Reward menu is posted or available ( ) Yes ( ) No

Comments:_____

_____

IMPLEMENTATION CHECKLIST (Continued)
Page 3

4. Contracts

a. Teacher or aide checks off child's work as soon as completed ( ) Yes ( ) No

b. Free time or choice of activity immediately follows task completion ( ) Yes ( ) No

5. Individualized Instruction

a. Kids do different level tasks ( ) Yes ( ) No

Comments: _____

_____

b. Kids have individual schedules ( ) Yes ( ) No

c. Individual schedules include group tasks, individual tasks and reward time ( ) Yes ( ) No

Comments: _____

_____

d. Folders are used for daily work ( ) Yes ( ) No

(If you marked "NO" above, explain how work was presented to kids:

_____

_____

_____

MATERIALS

Check (√) materials, equipment, or activities visibly available to children in classroom. Check twice (√√) those things you observe in use while you are in the classroom. Give examples if possible where space is provided.

ARTS AND CRAFTS

____ Chalk
____ Charcoal
____ Clay
____ Crayons
____ Collage and Paper Mache Materials (paste, paper, etc.)
____ Finger Paint
____ Macrame
____ Models
____ Mosaics
____ Origami (Japanese Paper Folding)
____ Painting
____ Stitchery
____ Woodwork
____ Other_____
_____
_____

If Many, Estimate #_____

AUDIO VISUAL

____ Camera
____ Cassette and Cassette Tapes
____ Films
____ Projector
____ Filmstrips
____ Viewer
____ Language Master
____ Overhead Projector
____ Records
____ Record Player
____ Slides
____ Projector or Viewer
____ Tapes
____ Tape Recorder
____ Other_____
_____
_____

If Many, Estimate #_____

GAMES

Estimate Number_____
____ _____
____ _____
____ _____
____ Puzzles (jig saw, cross word, shapes)
____ Other_____
_____
_____

SCIENCE

____ Animals_____
____ Aquarium
____ Chemistry Set
____ Electricity Experiment (Battery, etc.)
____ Herb Garden
____ Magnets
____ Magnifying Glass
____ Measuring Instruments (Measuring Cups, Spoons, Rulers, Yardsticks)
____ Microscope
____ Plants
____ Terrarium
____ Rock Collection
____ Shell Collection
____ Thermometer
____ Barometer
____ Weights
____ Other_____
_____
_____

LIBRARY

____ Magazines_____
_____
_____
____ Newspapers_____
_____
_____
____ Dictionary
____ Encyclopedia
____ Recreational Reading Book

If Many, Estimate #_____

If Many, Estimate #_____

IMPLEMENTATION CHECKLIST (Continued)
Page 5

7. Were there unusual physical circumstances in the room? (Bolted down furniture, no wall space, small room, etc.) Explain:

_____

_____

_____

8. Briefly describe what was happening in the class at the time of observation:

_____

_____

_____

9. Do you consider that this was a valid assessment of what goes on daily in the classroom? ( )YES ( )NO (If NO, explain)

_____

_____

_____

_____
Signature of Observer

APPENDIX IX

OPERATIONAL DEFINITIONS FOR OBSERVER CHECKLIST

OPERATIONAL DEFINITIONS FOR OBSERVER CHECKLIST

(Note: Follow the Observation Checklist as you study these definitions) Memorize the underlined terms and their meaning.

1. ROOM ARRANGEMENT

a. Furniture arrangement:

Total Group: All student seating is included in one arrangement; includes seats set apart for disciplinary purposes and extra chairs. Example: All chairs or desks in rows facing blackboard. (Check this option if teacher is instructing/supervising total class during total time of your observation).

Small Groups: Seating and/or workspace for two or more students (maximum equals less than one third of class).

Individuals: Places where one student works alone. Example: of arrangement for "individuals only": classroom with a separate cubical for each student. Watch for easy chair; rocking chair; stool, bench; cushions, etc., which are evidences of individual work areas.

Large Group: Sufficient seating and/or workspace for at least one third of class.

b. Activity Centers: Functionally separate areas of the room. The defining characteristic for all centers is that they provide students with materials and/or equipment which they can actively do something with, and a place to do it.

Library: Must contain a minimum of ten different books or other reading materials (magazines, newspapers) may also have lamp, easy chair, typewriter.

Audio-Visual: Must contain a minimum of two pieces of equipment: record player, viewmaster, tape recorder, camera, teaching machine. Must also contain materials to use with the equipment, e.g. a filmstrip to go with the filmstrip projector; records to use with the record player. It is not necessary that the two pieces of equipment be physically next to each other.

Activity-Games: Must contain a minimum of three recreational or learning games or activities; these may be commercial or teacher-made.

Arts and Crafts: Must contain a minimum of two activities (painting, weaving, woodwork, modeling, stitchery, ceramics, cooking, etc.) Materials to use for any art activities must be available .

Science: Must contain at least one science-related project or display--with materials (equipment) or content which the students can interact with rather than just look at.

Note: Centers may be named differently. For example, a Library Center could be called a Communications Center, Social Center, etc. Any other obvious activity centers should be described as fully as possible in terms of contents and use by students in the space for "Comments".

2. ROOM ENVIRONMENT: The checklist suggests a minimal list of novel items which are not usually found in the average classroom. If you are in doubt about any item you see in the room, list it anyway!

Area Rugs: usually used to set off a special area. Do not check if the room is fully carpeted.

Individual Study Carrels: May be rather permanent structures, or improvised out of screens, cardboard dividers, etc. providing a private work area.

Posters: unusual, bright, colorful and related to NOW. Does not include typical study prints used for bulletin boards for social studies etc. or things like a map of the United States.

3. REWARDS: A reward system is operating in the classroom if the teacher consistently rewards the students for their academic and social behaviors.

a. Academic behaviors include reading, writing, arithmetic, etc.
b. Social behaviors include sitting at desk ready to work, raising one's hand; behaviors that are associated with "good citizenship".

The reward system may be used for the class as a group, and/or for individual children.

A reward is earned by the child when he completes a certain amount of work or when his social behavior is appropriate. A teacher may be rewarding children for academic behaviors only, social behaviors only, or for both academic behaviors and social behaviors.

a.& b. Individual Rewards: Examples: Johnny gets a checkmark for completing his math assignment; The teacher praises Sally for returning to her seat.

c. Rewards Group Behavior: Example: "Everyone came in the room quietly, so you each get a cookie" or "Boys and Girls, that was great!"

d. Teachers may use one or more of the following types of rewards:

Checkmarks or Stars: may be observed on card on child's desk, or written on his work.

Food, Praise, Smile, Touch: given by the teacher, following a specific task or behavior by the child.

Activities and Privileges: games, painting, listening to records, etc. Look for posted list of rewards available; listen for verbal statements by teacher. If students have schedules, look at these for special activities which follow academic work.

Tokens: watch to see if children are collecting tokens such as poker chips, play money, etc.

Tangibles: include any objects such as toy cars, yoyos, trinkets which are non-edible and which are given to the child to keep.

Free Time: child is given an amount of time to engage in something he chooses and wants to do.

e. Choice of Reward: Evidence that children have some chance to choose their own reward and that rewards are not always selected by the teacher. Examples of clues that children have a choice are things like "Free Time"; a list of activities to choose from; or the teacher asking the child what he would like to do.

f. Reward Menu : a list of activities, privileges from which the children can choose for their "Free Time".

4. CONTRACTS:

A contract is any verbal or written communication between the teacher and student which specifies the work to be done by the student and the reward which will follow the completed work. The child's completed work is checked by the teacher before he gets the reward. Contracts should be stated positively--not in the form of threats. Example: 20 addition problems completed by child, teacher checks off work quickly, child gets to play checkers for 10 minutes.

5. INDIVIDUALIZED INSTRUCTION

a. Different level tasks: The essential feature is that all students are not doing the same work in the same reading book, or the same worksheet in math, or the same activity in any given subject area. Different level tasks means, for example, the Johnny works on a multiplication worksheet, Billy works on an addition worksheet and Jane works with counting sticks. All are working on math, but at their own level.

b. Individual Schedules: Check "Yes" to this item if each child has a "tailor-made" list of tasks and activities to be completed during a portion of the day.

c. Check "Yes" to this item only if the tailor-made schedule includes at least one task which the child does with another child or group of children (group tasks), one or more tasks the child does by himself (individual) and times for rewards. (It is possible to check "Yes" to item 5b and "No" to item 5c.

6. MATERIALS;

In order to observe the materials present in the room, you are going to have to really move around the room and discretely peek!

APPENDIX X

IMPLEMENTATION CHECKLIST SCORING CRITERIA

REVISED IMPLEMENTATION CHECKLIST SCORING CRITERIA - June 1972

Items		Points
1a	+1 for each large, small, and/or individual 0 for total group only +1 for change in room arrangement drawing on post checklist	4 maximum
1b	1 point for each Activity Center	6 maximum
1c	Yes	1
2	+1 for each acceptable item to maximum of 5	5 maximum
3a	Yes	1
3b	Yes	1
3c	Yes	1
3d	+1 for each except either stars or checkmarks or tokens = 1 point only Free time = 2 Activities and Privileges = 1	8 maximum
3e	Yes	1
3f	Yes	1
4	Yes on both a and b = 2 0 if only one (a or b) is checked	2
5a	Yes	1
5b	Yes	1
5c	Yes	1
5d	Yes	1
Materials = 5 points maximum for each of the 5 categories for maximum of 25 Library Section--all options have to be checked to get 5 Audio Visual Section--equipment and software both must be checked to receive 1 point e.g. Tapes and Tape Recorder; Records and Player		25
		60 TOTAL POINTS

IMPLEMENTATION CHECKLIST SCORING--continued

Because raw scores on the implementation checklist did not equally represent each component of this system (Room Environment, Behavior Management and Individualized Instruction), points were weighted so that a teacher who implemented an individualized instruction system, for instance, would receive the same degree of credit as a teacher who added materials and changed her room arrangement. The intent was to make the changes made on any item of the checklist more evenly reflected in the participant's checklist score.

	Total Possible Raw Score		Weight		Total Possible Weighted Score
Component: Room Environment Checklist Items: 1. Room Arrangement 2. Room Environment 6. Materials	41	X	1	=	41
Component: Behavior Management Checklist Item: 3. Rewards	13	X	3	=	39
Component: Individualized Instruction Checklist Items: 4. Contracts 5. Individualized Instruction	6	x	6	=	36
	60				116

APPENDIX XI

OBSERVER TRAINING MATERIALS

INSTRUCTIONAL MATERIALS CENTER
SPECIAL EDUCATION

1031 SOUTH BROADWAY — SUITE 623
UNIVERSITY OF SOUTHERN CALIFORNIA / A USOE PROJECT
LOS ANGELES, CALIFORNIA 90015 747-9308

OBSERVER TRAINING PROGRAM

Introduction:

A classroom atmosphere is so complex and variable that an objective description can only be obtained by trained observers. Reliable observation requires the ability to focus on what is to be observed and to precisely record the observation.

This training sequence has been designed to facilitate the acquisition of precise observational skills by providing practice in selecting specific variables, seeing them and recording them. The training sequence also provides clear definitions of the variables to be observed in order to promote maximum understanding and agreement among observers.

The Training Sequence: (Four Steps)

1. OPERATIONAL DEFINITIONS and the BEHAVIOR CHECKLIST: (See Appendices VIII,IX)

   The checklist will eventually be used in the actual classroom observations. The definitions are designed to clarify the terms and sections on the checklist. Please read these over concurrently so you are thoroughly familiar with them before you begin Step #2.

2. VISUAL PRESENTATION and SCRIPT: (Slides 1-39)

   The slides and script provide a discussion of the meaning of each variable on the checklist. Read the script carefully as you view each slide. Fill in the answers on your script for each test slide. Here is a good opportunity for discussion. After each test slide, check your answers with the trainer, ask questions, make comments!

3. TEST VISUALS: (Slides 41-61)

   These visuals are to be used with the actual checklist. Fill in the answers as you observe each slide. Do not discuss these slides or answers until you complete the entire test and have checked your answers with the answer key.

4. CLASSROOM OBSERVATIONS (Using the Checklist):

   This last step in the training procedure involves using the behavior checklist in an actual live classroom setting. (See "Helpful Hints" handout and GOOD LUCK!)

HELPFUL HINTS FOR OBSERVATION DAY:

Before You Go:

*Memorize the Operational Definitions
*Become Familiar with the Behavior Checklist

While You Are in the Classroom:

*Greet the teacher. Introduce yourself and say you are the observer from the "Structuring the Classroom" Evaluation project. Tell the teacher to continue whatever she's doing, that you would just like to look around a bit.

*Take a Few Minutes to "Get a Feel for the Room"- Just watch what is going on.

*Spend $\frac{1}{2}$ of your observation time focusing on the DYNAMICS OF STUDENT-TEACHER INTERACTION (Pages 2 and 3 of Checklist)

*Spend $\frac{1}{2}$ of your observation time focusing on ROOM ARRANGEMENT AND MATERIALS (Pages 1 and 4 of Checklist)

*Move around the room as much as possible without disturbing children and teacher.

*Write down comments-especially if you have any doubts about what you observe.

APPENDIX XII

STUDENT INFORMATION SHEET

STRUCTURING THE CLASSROOM FOR SUCCESS

STUDENT INFORMATION SHEET

1) Code No._____

2) Age: 18-22 _____ 31-40 _____

23-30 _____ Over 40 _____

3) Sex: M_____ F_____

4) Classroom Teaching Experience: Yes_____ No_____

If Yes, number of years _____

Regular education _____

Special education _____ Handicap Area _____

_____

Grade level _____

5) Do you intend to obtain a credential?

Elementary _____

Secondary _____

Special Education _____

Other _____

None _____

6) Number of Education courses taken _____

Number of Psychology courses taken _____

APPENDIX XIII

LETTER TO SCHOOL PRINCIPALS
(HACIENDA-LA PUENTE)

INSTRUCTIONAL MATERIALS CENTER
SPECIAL EDUCATION

1031 South Broadway -- Suite 623
University of Southern California/ A USOE PROJECT
Los Angeles, California 90015 - 747-9308

September 13, 1971

Mrs. June Jones
La Subida School
15444 Regalado
Hacienda Heights, California 91745

Dear Mrs. Jones:

In October 19, 20, and 21, 1971 the Instructional Materials Center for Special Education will be presenting a workshop to 40 elementary teachers from regular and special classes in the Hacienda La Puente School District. Enclosed are letters of invitation to the regular and special class teachers in your school. Would you please see that each teacher receives one? We are asking the teachers to volunteer to participate in the workshop to evaluate a media package which we have developed.

The media package is designed as an inservice program for educators who are seeking new ways to make classroom learning more effective and enjoyable. The package contains six short slide-tape shows dealing with:

1. Classroom environment
2. Creating activity centers
3. Principles of behavior
4. Behavior management in the classroom
5. Selection and sequencing of instructional materials

A programmed exercise accompanies each slide-tape show, and a bibliography of additional sources for further ideas is included.

We would also like to have up to ten elementary school principals involved in the workshop. The three sessions

This project was supported in part by a grant from the Bureau of Education for the Handicapped, U.S. Office of Education which is gratefully acknowledged.

will be approximately one and one half hours in length each. The place and time of the workshops will be announced at a later date.

If you are interested in participating, please complete the attached form and return it to:

IMCSE
1031 South Broadway
Los Angeles, California 90015

Note: Registration of principals will be limited, so please mail your application as soon as possible. Closing date for application is September 27, 1971. Your application will be confirmed by October 1.

Thank you for your cooperation.

Sincerely,

Cara B. Volkmor
Project Coordinator

- -

I would like to participate in the IMCSE workshop on

October 19, 20, and 21.

Name _____

School Address _____

_____

_____

APPENDIX XIV

LETTER TO CLASSROOM TEACHERS
(HACIENDS-LA PUENTE)

Letter to Classroom Teachers

Dear Teacher:

We are looking for 40 volunteers from regular and special education--elementary level--to participate in the evaluation of a media product developed by IMCSE/USC for teacher inservice.

Hacienda La Puente Unified School District was selected from a number of districts who responded to our recent announcement in the IMCSE Communicator. Your district will be the first to field test the media package.

Take a moment to consider these questions:

Are you interested in creating a more stimulating learning environment in the classroom?

Would you like your students to find learning a joyful and rewarding experience?

Have you wondered how to successfully individualize instruction for your students?

Do you ever feel you are at your "wits end" because it seems you spend more time trying to control some children than you do teaching them?

Are you looking for effective ways to help children learn to manage their own behavior?

If you answered "YES" to any of the questions above, we think you will be interested in participating in a workshop to evaluate our media package called "Structuring the Classroom for Success."

Description of the Media Package

The media package we have developed provides direct answers to teachers who are seeking new ways to make classroom learning more effective and more enjoyable. The package contains six short slide-tape shows dealing with:

This project was supported in part by a grant from the Bureau of Education for the Handicapped, U.S. Office of Education which is gratefully acknowledged.

1. Classroom environment
2. Creating activity centers
3. Principles of behavior
4. Behavior management in the classroom
5. Selection and sequencing of instructional materials

A programmed exercise accompanies each slide-tape show, and a bibliography of additional sources for further ideas is included.

The Workshop

We will be holding a three-session workshop in your district on October 19, 20, and 21, 1971. Each session will be approximately one and one half hours in length. The place and time of the workshop will be announced at a later time.

If you are interested in attending, here are three things to consider:

1. We will be making one brief (10-15 min.) visit to your classroom during the two weeks prior to the workshop.

2. We will return to visit your classroom during the week of November 25. (The visit is for the purpose of observing the class. The observer will not interrupt it.)

3. Participation in all three workshop sessions is necessary.

Now, if you are still interested, here is how to apply. Complete the form below, tear off and mail to:

IMCSE
1031 South Broadway
Los Angeles, California 90015

Note: Workshop registration is limited to 40 teachers, so mail your application as soon as possible. Closing date for application is September 27, 1971.

Your application will be confirmed by October 1, 1971.

Letter to Classroom Teachers - Page 3.

Thank you for your cooperation.

Sincerely,

Cara B. Volkmor
Project Coordinator

Bill Sandison, Director, Special Ed.

John Clonts, Assistant Superintendent

- -

Name _____

School Address _____

_____

Special Ed. _____ Handicap area _____

Regular Ed. _____ Grade Level _____

APPENDIX XV

LETTER TO RURAL COORDINATOR

April 17, 1972

Mr. Leo D. Sandoval
Director of Special Services
P.O. Box 85
Standard, California 95373

Dear Leo:

We are happy that you are interested in participating in the field testing of our media package, "Structuring the Classroom for Success." We are enclosing the following items:

1. Evaluation format and calendar
2. Sample letter of invitation
3. Media product description.

The evaluation format outlines what we would need from you and what the Instructional Materials Center would provide. Please read this over and let us know your reactions.

The sample letter of invitation is for obtaining teacher volunteers. If after reading the evaluation requirements you are still interested in participating, the letter of invitation should be circulated soon to all of your elementary special education teachers so that volunteers can be identified before school ends in June. Please do not circulate the evaluation format - this is your your information.

Please feel free to call us collect regarding your participation and any questions you may have.

Sincerely,

Cara B. Volkmor
Project Coordinator

Marilyn Higgins
Research Associate

FORMAT FOR FALL 1972 EVALUATION OF
"STRUCTURING THE CLASSROOM
FOR SUCCESS"

In order to evaluate the effectiveness of the auto-instructional media package in enabling teachers to implement ideas in their classrooms, we have developed two evaluation instruments:

a. a pre/post test to measure content mastery
b. an observation checklist focusing on observables in the classroom

For your participation in the evaluation of the media product, we would need:

1. six teachers (volunteers) who would like to view the package and try out some of the ideas in their classrooms. (See enclosed sample invitation for teachers)

2. the committment of someone in your district or county to act as a liaison person and
   a. select an impartial person to be trained by IMCSE staff to act as the classroom observer in each of the six teachers' classrooms. (observer may be graduate student, housewife, teacher aide, etc.)

   b. handle distribution of the media packages and collect the evaluation data for us.

IMCSE PROJECT STAFF WILL:

1. train the observer (we will pay travel expenses and hourly rate for observation time)

2. supply 3 media packages (visuals and tapes) and 6 sets of the consumable guidebook materials which the teachers may keep.

3. supply enough copies of the pretest, post test, pre and post observation checklists for each teacher.

4. analyze the data obtained from the pre/post tests and observation checklists

5. give one media package (visuals and tapes) and complete set of guidebook materials to district or county upon completion of evaluation.

EVALUATION TIME LINE:

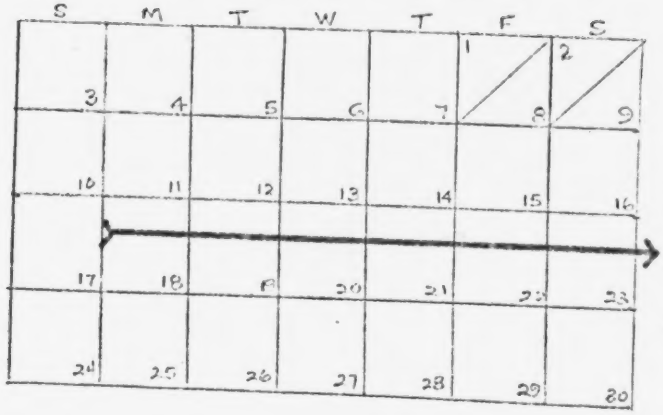
May-June 1972	1.	circulate letter of invitation to possible special education teacher participants.
	2.	secure names of volunteers and send names to IMCSE
June-Aug. 1972	3.	meet with IMC project staff for purpose of observer training and introduction to the package and its uses (this would involve 1 day some time during the summer months)
SEPT-DEC. 1972 See Attached Calendar Pages	4.	observer will conduct a 15 min. pre-observation in each of the six teacher volunteer classrooms
	5.	district liaison person collects pretests from all six teachers before giving them the media package
	6.	each teacher keeps media package for viewing on their own for a period of two-three weeks
	7.	district liaison person collects the post test from each teacher and the media package. (teachers may keep the printed materials)
	8.	observer will conduct a 15 min. post observation of each of the six teacher volunteer classrooms
	9.	district liaison person forwards to IMCSE all pre tests, post tests, pre and post observation checklists and 2 of the 3 media packages. The 3rd media package and a new set of all printed guidebook materials will remain with the district or county permanently.

"STRUCTURING THE CLASSROOM FOR SUCCESS"
INSTRUCTIONAL MATERIALS CENTER FOR SPECIAL EDUCATION
1031 South Broadway Suite 623
Los Angeles, California 90015

PROJECT STAFF:

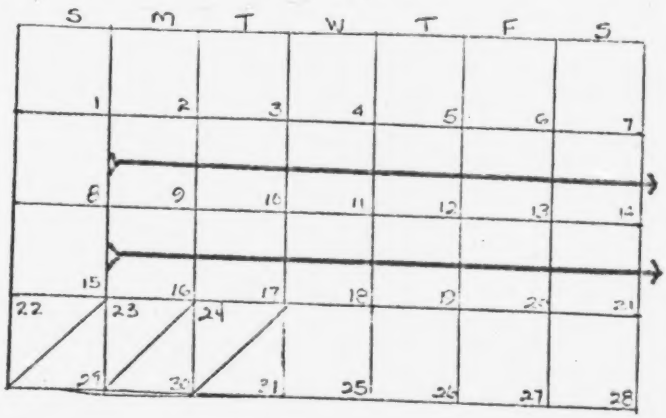
Cara Volkmor, Project Coordinator
Anne Langstaff, Project Consultant
Marilyn Higgins, Research Associate

September



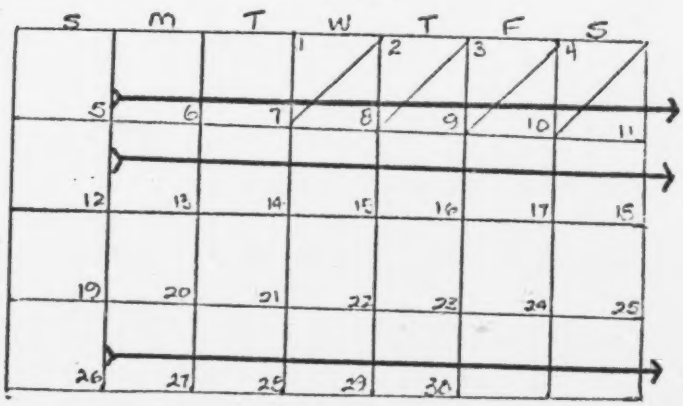
1) PreObservation of all teachers.
2) Administer & Collect pretest from Teachers #1,2, & 3.
3) Leave media packages with Teachers #1,2, & 3.

October



1) By Oct. 16 collect posttests & media packages from Teachers #1, 2, & 3.
2) By Oct. 20, administer & collect pretests from Teachers #4,5,&6.
3) Leave media packages with Teachers #4, 5, &6.

November



Post Observations of Teachers 1,2,3

Administer and collect posttest and collect media packages from Teachers #4, 5, & 6.

Post Observations of Teachers 4,5,6

INSTRUCTIONAL MATERIALS CENTER
SPECIAL EDUCATION

1031 SOUTH BROADWAY — SUITE 623
UNIVERSITY OF SOUTHERN CALIFORNIA / A USOE PROJECT
LOS ANGELES, CALIFORNIA 90015 747-9308

SAMPLE LETTER OF INVITATION TO TEACHERS TO PARTICIPATE IN FIELD TESTING OF STRUCTURING THE CLASSROOM FOR SUCCESS

Dear Teacher:

We are looking for volunteers from special education--elementary level--to participate in the evaluation of a media product developed by IMCSE/USC as a self-instructional package for teacher inservice. You will be one of the first to field test the media package which will soon be disseminated nationally. The evaluation will begin shortly after school begins in September, but we need to know who will participate before the end of June.

Take a moment to consider these questions:

Are you interested in creating a more stimulating learning environment in the classroom?

Would you like your students to find learning a joyful and rewarding experience?

Have you wondered how to successfully individualize instruction for your students?

Do you ever feel you are at your "wits end" because it seems you spend more time trying to control some children than you do teaching them?

Are you looking for effective ways to help children learn to manage their own behavior?

If you answered "YES" to any of the questions above, we think you will be interested in participating in the evaluation of our media package called "STRUCTURING THE CLASSROOM FOR SUCCESS".

Description of the Media Package

The media package we have developed provides direct answers to teachers who are seeking new ways to make classroom learning more effective and more enjoyable. The package contains six short filmstrips dealing with:

CLASSROOM ENVIRONMENT, CREATING ACTIVITY CENTERS, PRINCIPLES OF BEHAVIOR, BEHAVIOR MANAGEMENT IN THE CLASSROOM, and SELECTION AND SEQUENCING OF INSTRUCTIONAL MATERIALS

A programmed exercise accompanies each filmstrip and a bibliography of additional sources for further ideas is included.

Evaluation Format - What We Need From You:

You will receive the media package for a period of two weeks to view on your own. You may keep the guidebook exercises and resource information; the filmstrips and tapes are to be returned at the end of the two-week period.

If you are interested, here are three things to consider:

1. an impartial observer will be making one brief (15-20 min.) visit to your classroom before you receive the package.

2. The same observer will return to visit your classroom three weeks after you return the package. (This visit is for the purpose of observing the class. The observer will not interrupt it.)

3. You must agree to view all six filmstrips and complete the guidebook sections on your own over the two week period.

Now, if you are still interested, here is how to apply. Complete the form below, tear off and mail to:

Note: Registration is limited to six teachers, so mail your application as soon as possible. Closing date for applications is _____.

Your application will be confirmed by_____.

Thank you for your cooperation.

Sincerely,

Cara B. Volkmor
Project Coordinator
IMCSE

Name_____

School_____

Home Address _____

_____

Grade Level_____Handicap Area_____

APPENDIX XVI

LETTER TO RURAL TEACHER VOLUNTEERS

INSTRUCTIONAL MATERIALS CENTER
SPECIAL EDUCATION

1031 SOUTH BROADWAY — SUITE 623
UNIVERSITY OF SOUTHERN CALIFORNIA / A USOE PROJECT
LOS ANGELES, CALIFORNIA 90015 747-9308

June 1, 1972

We are pleased that you volunteered to participate in the field testing of our media product "Structuring the Classroom for Success". You are one of a selected few to evaluate this product across the country before it is distributed nationally. STRUCTURING THE CLASSROOM FOR SUCCESS is a self-instructional package consisting of six filmstrips, tapes and related guidebook which provide specific ideas on classroom environment, activity centers, behavior management and sequencing instructional materials.

We are planning to place a media package with you for a two-week period after school begins in the Fall. Before we do, here is a reminder of the commitment we are looking for from you:

1. agreement to view all six filmstrips and read through the guidebook during the two-week period that the media package is in your possession. (We estimate it will take a minimum of 4 hours to view all the filmstrips and read the guidebook).

2. willingness to allow an impartial observer to visit your classroom for a short time before and after you view the media package.

3. we will also ask that you take a short pre and post test based on the content of the filmstrips. This test is designed to let us know whether the package is teaching the concepts we hope it will. The test will be scored by us and the results are for our information only.

If you are sure that you will be able to fully meet these commitments in the Fall, please return the enclosed card. If we do not hear from you, we will assume that you are no longer interested.

We will be in contact with you in September either directly or through regarding the exact dates that you will be receiving the package.

We anticipate that this will be a rewarding experience for you and are looking forward to your reactions to the product we have developed.

Sincerely,

Cara B. Volkmor

Cara B. Volkmor
Project Coordinator

Marilyn Higgins

Marilyn Higgins
Research Associate

APPENDIX XVII

TEACHER INFORMATION SHEET

STRUCTURING THE CLASSROOM FOR SUCCESS

TEACHER INFORMATION SHEET

1) Code No._____

2) Age: Under 23_____ 31-40_____

23-30_____ Over 40_____

3) Sex: M_____ F_____

4) Classroom Teaching Experience:

Number of years_____

Regular education_____Handicap Area_____

_____

Grade level_____

5) Do you hold a credential? Yes_____ No_____

Elementary_____

Secondary_____

Special Education_____

Other_____

6) Number of Education courses taken beyond requirement for credential

0_____
1-5_____
6 or more_____

Number of graduate Psychology courses taken

0_____
1-5_____
6 or more_____

Number of inservice programs attended in last 3 years

0_____
1-5_____
6 or more_____

APPENDIX XVIII

CONTENT SEQUENCE: SAMPLE I

CONTENT SEQUENCE: SAMPLE I

Day 1--This session was conducted on the first class meeting.

a. The students were given the following information:

We are asking your cooperation in participating in a research study designed to evaluate the effectiveness of a pilot version of a media package being developed by the Instructional Materials Center, University of Southern California. The project is funded by the United States Office of Education, and its purpose is to create an auto-instructional media package for teachers and students--an instructional sequence that teachers and students can use on their own.

During the next few class meetings we will be going through the instructional sequence entitled "Structuring the Classroom for Success." There will be no discussion of the content until all of the sessions are completed. We are, however, interested in your suggestions, so save any comments and ideas you may have until the end. You may ask questions at any time for clarification in following the directions given. It is important that you attend each session.

You have each been given a folder; the folder contains evaluation sheets on which you can record your comments following each session. There is also a Student Information Sheet which you are asked to complete now. You will notice that a space is provided on the sheet for a code number. Please remember the number you used because you will be asked to use it again. This procedure will insure that you remain anonymous throughout the study.

b. The information sheets were collected.

c. Item one of the pretest was handed to each student. These instructions were given: "Please write your code number on this sheet. You will be given five minutes for this task."

d. Item one was then collected at the end of the five minute period.

e. The remainder of the pretest was handed out to the students. The instructions at the top of the page were read aloud to the students. There were also told, "On the open ended questions write down as many things as you can think of quickly, and then go on to the other questions." After thirty minutes all tests were collected; students were first reminded to check to see that they had put their code number on the test.

f. The introduction to the guidebook was handed out; students were given time to read it.

g. Slide sequence I--Overview was shown.

h. Students were asked to keep all handouts in their folders and to bring their folders to class the next day.

Day 2

a. Slide sequence II--Room environment was presented; the accompanying guidebook section was handed to the students who were instructed to complete the exercises and check their answers.

b. Slide sequence III--Creating Activity Centers was shown; students completed the accompanying guidebook section.

Day 3

a. Slide sequence IV--Behavior Management Principles was shown; students completed the accompanying guidebook section.

b. Slide sequence V--Behavior Management in the Classroom was presented; students completed the appropriate portion of the guidebook.

Day 4

a. Slide sequence VI--Selecting and Sequencing Instructional Materials was presented; students completed the accompanying guidebook section.

Day 5

a. Slide sequence I--Overview was shown for review.

b. The posttest was administered; procedures were identical to those used for the administration of the pretest.

c. Evaluation sheets were collected from the students, and discussion followed.

APPENDIX XIX

CONTENT SEQUENCE: SAMPLE II

Session 1

a. The participants were given the following information:

You have volunteered to participate in a research study designed to evaluate the effectiveness of a pilot version of a media package being developed by the Instructional Materials Center for Special Education, University of Southern California. The project is funded by the United States Office of Education, and its purpose is to create an auto-instructional media package for teachers and students--an instructional sequence that teachers and students can use on their own. When the package for teachers and students is finished it will be disseminated nationally. You will be presented with a great many techniques in the slide-tape shows. These techniques have been used successfully in many types of classrooms. Now, we are interested in whether the media package itself can effectively teach these techniques and help teachers to implement them in their classrooms. This is why we are here.

During this workshop you will see the entire media package. You will see all types of children--those in regular classrooms, some in special education classrooms from seriously emotionally disturbed to deaf and hard of hearing. You will also see a wide variety of classroom facilities. The ideas we are presenting work with all children in all settings.

Keep in mind as you view the slide-tape shows that you are seeing total programs in operation--the ideal. These programs did not happen overnight, but resulted from teachers and children making gradual changes in small steps.

At the end of the workshop you will be asked to indicate those ideas from the media package that you think you might like to try in your classroom.

Since this is a research project, we cannot answer any questions on the content, or hold any discussion until the entire program is completed. You will have an opportunity to indicate whether you would like to participate in a follow-up discussion at the end of November. During the workshop you may ask questions at any time for clarification in following the directions given. It is important that you attend each of the sessions.

We will now circulate a list of the names of all the participants. Beside each name is a number which is your code number for the project. When the list comes to you, please circle your number and remember it as you will be asked to use it throughout the workshop. This procedure will insure that you remain anonymous throughout the study.

Session 1--continued

b. The Teacher Information Sheets were handed out and participants were asked to complete these and identify themselves by their code number. The information sheets were collected.

c. Item one of the pretest was handed to each participant. These instructions were given. "Please write your code number on this sheet. You will be given five minutes for this task."

d. Item one was collected at the end of the five minute period.

e. The remainder of the pretest was handed out to the participants. The instructions at the top of the page were read aloud to the participants. They were also told, "On the open-ended questions write down as many things as you can think of quickly, and then go on to the other questions." After thirty minutes all tests were collected; participants were reminded to put their code numbers on the test.

f. Folders containing the schedule for the workshop and the Introduction to the guidebook were handed out. Participants were given time to read these materials.

g. Slide Sequence I--Overview was shown.

h. Slide Sequence II--Room environment was presented; the accompanying guidebook section was handed out to the participants who were instructed to complete the exercises and check their answers.

i. It was suggested that participants keep all handouts in their folders and bring the folders to the remaining sessions of the workshop.

Session 2

a. Slide Sequence III--Creating Activity Centers was shown; participants completed the accompanying guidebook section.

b. Slide Sequence IV--Behavior Management Principles was shown; participants completed the appropriate guidebook section.

c. Slide Sequence V--Behavior Management in the Classroom was shown; participants completed the accompanying guidebook section.

Session 3

a. Slide Sequence VI--Selecting and Sequencing Instructional Materials was shown; participants completed the accompanying guidebook section.

b. Slide Sequence I--Overview was shown for review.

c. Teacher Contract Sheets (attached) were completed in duplicate by the teacher participants. One copy was collected. Teachers were asked to indicate their desire for a follow-up session at the end of November by writing this at bottom of the contract copy which was turned in.

d. The posttest was administered; procedures were identical to those used for the administration of the pretest.

e. Five Teacher Activity Log Sheets were distributed to each teacher participant to assist them in recording their methods and reactions during the implementation phase.

f. A guidebook supplement for teachers (attached) containing some specific suggestions for how to start to implement new ideas in the classroom and sample student daily work schedules were handed to the teachers.

g. Participants were given blank pieces of paper on which they were requested to write open-ended evaluations of the media package. They were told that they could either turn them in at that time or return them by mail.

A. Indicate at least one or more techniques which you are not presently doing that you intend to initiate by May 15,

B. Check the items which describe techniques you are presently using, or would like to improve.

	Would Like to Initiate ↓	Am Presently Doing ↓	Would Like To Improve or Extend ↓
1. Create an "Open" or "Decentralized" classroom which includes the following characteristics: a) furniture arranged for large groups, small groups, and individual uses, b) achievement or task area distinct from other areas of room, and c) activity centers (two or more) established which provide students with direct access to materials.	☐	☐	☐
2. Increase the amount of stimulation and variety in the classroom environment as evidence by the presence in the classroom of novel materials such as: easy chair, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc.	☐	☐	☐
3. Implement a behavior management system which includes: a) teacher rewarding positive behaviors and/or appropriately consequating unacceptable behavior, b) student choice of reward.	☐	☐	☐
4. Implement a contract system for student performance, including all of the following features: a) teacher initiates verbal or written contracts with individual students and/or revises or changes stated contract, b) teacher (or aide) checks off student's work upon completion, and c) rewards are given and are contingent upon task completion.	☐	☐	☐
5. Provide students with individualized schedules or daily programs which include: a) group tasks or activities, b) individual tasks or activities and c) choice or free time.	☐	☐	☐
6. Increase the number of materials and equipement (Arts and Crafts, Audio-Visual, Games, Science, Library) in use in the classroom.	☐	☐	☐

Signature_____

School_____

I would like to attend a follow-up meeting to discuss the ideas and techniques presented in the media package. ( ) Yes ( ) No

I would like a consultant to visit my class after May 19. ( ) Yes ( ) No

A. Indicate at least one or more techniques which you are not presently doing that you intend to initiate by May 15,

B. Check the items which describe techniques you are presently using, or would like to improve.

	Would Like to Initiate ↓	Am Presently Doing ↓	Would Like To Improve or Extend ↓
1. Create an "Open" or "Decentralized" classroom which includes the following characteristics: a) furniture arranged for large groups, small groups, and individual uses, b) achievement or task area distinct from other areas of room, and c) activity centers (two or more) established which provide students with direct access to materials.	☐	☐	☐
2. Increase the amount of stimulation and variety in the classroom environment as evidence by the presence in the classroom of novel materials such as: easy chair, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc.	☐	☐	☐
3. Implement a behavior management system which includes: a) teacher rewarding positive behaviors and/or appropriately consequating unacceptable behavior, b) student choice of reward.	☐	☐	☐
4. Implement a contract system for student performance, including all of the following features: a) teacher initiates verbal or written contracts with individual students and/or revises or changes stated contract, b) teacher (or aide) checks off student's work upon completion, and c) rewards are given and are contingent upon task completion.	☐	☐	☐
5. Provide students with individualized schedules or daily programs which include: a) group tasks or activities, b) individual tasks or activities and c) choice or free time.	☐	☐	☐
6. Increase the number of materials and equipement (Arts and Crafts, Audio-Visual, Games, Science, Library) in use in the classroom.	☐	☐	☐

Signature_____

School_____

I would like to attend a follow-up meeting to discuss the ideas and techniques presented in the media package. ( ) Yes ( ) No

I would like a consultant to visit my class after May 19. ( ) Yes ( ) No

A. Indicate at least one or more techniques which you are not presently doing that you intend to initiate by November 15.

B. Check the items which describe techniques you are presently using, or would like to improve.

	Would Like To Initiate	Am Presently Doing	Would Like To Improve or Extend
1. Create an "Open" or "Decentralized" classroom including the following characteristics:			
a. furniture arranged for large groups, small groups, and individual uses.			
b. achievement or task area distinct from other areas of room.			
c. activity centers (two or more) established which provide students with direct access to materials.			
2. Increase the amount of stimulation and variety in the classroom environment as evidenced by the presence in the classroom of novel materials such as: easy chair, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc.			
3. Implement a behavior management system including:			
a. teacher rewarding positive behaviors and/or appropriately consequating unacceptable behavior.			
b. student choice of reward.			
4. Implement a contract system for student performance, including all of the following features:			
a. teacher initiates verbal or written contracts with individual students and/or revises or changes stated contract.			
b. teacher (or aide) checks off student's work upon completion.			
c. rewards are given and are contingent upon task completion.			

	Would Like To Initiate	Am Presently Doing	Would Like To Improve or Extend
5. Provide students with individualized schedules or daily programs which include:			
a. group tasks or activities			
b. individual tasks or activities			
c. choice or free time			
6. Increase the number of materials and equipment (Arts and Crafts, Audio-Visual, Games, Science, Library) in use in the classroom.			

Signature_____

School_____

I would like to attend a follow-up meeting to discuss the ideas and techniques presented in the media package. ( ) Yes ( ) No

I would like a consultant to visit my class after November 15. ( ) Yes ( ) No

STRUCTURING THE CLASSROOM FOR SUCCESS

CONTENT OBJECTIVES

After viewing each sound filmstrip and completing the tasks in each guidebook chapter, participants will be able to:

1) Draw a room plan for an elementary classroom including self-contained activity centers and an achievement core area.

2) Identify the characteristics of an effective classroom learning environment including:

   a) An "open" or "decentralized" classroom plan
   b) Conditions necessary for individualized instruction
   c) Rationale for establishing activity centers

3) List characteristics or purposes for and content of each of the following centers:

   a) Achievement Center
   b) Library Center
   c) Activity Games Center
   d) Arts and Crafts Center
   e) Science Center
   f) Audio-Visual Center

4) Identify the defining characteristics of behavior patterns and reinforcers.

5) Identify types of reinforcers including primary, tangible, token, social, intrinsic and "natural".

6) Identify appropriate <u>selection</u> and <u>use</u> of reinforcers in the classroom learning situation.

7) Identify the characteristics of a student-teacher contract and at least 3 ways that a contract may be modified.

8) Identify the sequence of steps involved in planning individualized instruction.

9) Identify statements which are written in behavioral terms.

10) Identify functions of a daily schedule and give examples of tasks which can be included in a child's folder.

STRUCTURING THE CLASSROOM FOR SUCCESS

CLASSROOM IMPLEMENTATION OBJECTIVES

After viewing each sound filmstrip and completing the tasks in each guidebook chapter, teachers will be ready to begin to introduce the following techniques in their classrooms:

1. Create an "open" or "decentralized" classroom including the following characteristics:

   a. Furniture arranged for large, small groups and individual uses.

   b. Achievement or task area distinct from other areas of room.

   c. Activity centers (two or more) established which provide students with direct access to materials.

2. Increase the amount of stimulation and variety in the classroom environment as evidenced by the presence in the classroom of novel materials such as: Easy chair, lamp, area rug, mobiles, cushions, posters, individual study carrels, etc.

3. Implement a behavior management system including:

   a. Teacher rewarding positive behaviors and/or appropriately consequating unacceptable behavior.

   b. Student choice or reward.

4. Implement a contract system for student performance, including all of the following features:

   a. Teacher initiates verbal or written contracts with individual students and/or revises or changes stated contract.

   b. Teacher (or aide) checks off student's work upon completion.

   c. Rewards are given and are contingent upon task completion.

5. Provide students with individualized schedules or daily programs which include:

   a. Group tasks or activities.

   b. Individual tasks or activities.

   c. Choice or free time.

6. Increase the number of materials and equipment (Arts and Crafts, Audio-Visual, Games, Science, Library) in use in the classroom.

THE OPEN CLASSROOM--SOME IDEAS ON HOW TO START

The open classroom is a place where learning is fun, challenging, and activity based. In the slide shows you saw many ideas on the following areas: Room environment, activity centers, behavior management, sequencing instructional materials.

All of these areas are interrelated and necessary; however, successful changes occur gradually, and you should not expect to be able to make changes in all of these areas at once. Remember that change is often difficult; the starting point of change is discontent. If you were entirely satisfied with your classroom, you would not have volunteered for this workshop so you have already passed the first stage.

1. Choose the area you want to begin changing.

2. After you decide where to begin, make a plan and discuss it with a friend (preferably another teacher who attended the workshop).

3. If you decide to work first in the area of sequencing materials or behavior management, a helpful idea is to choose 10 minutes a day when you and your students try something new. You can then (as a starting point) extend this to one day a week, etc.

4. If you decide to work in the areas of room environment and activity centers introduce one change in furniture arrangement or one activity center with a few materials at first and gradually build on this.

5. Don't throw out everything you are presently doing!! Start by merely adding some new ideas, techniques, and materials to your existing classroom environment and program.

The following guidebook index may be helpful when planning.

1. Furniture arrangement, page 1, chapter II

2. Purpose and function of centers, page 4, chapter II

3. Ideas for specific centers and contents, chapter III

4. Classification of reinforcers, page 2, chapter IV
5. Teaching new behaviors, page 3, chapter IV
6. Natural reinforcers, page 1, 2, chapter V
7. Managing group behavior, page 2, chapter V
8. Contracts, page 3, chapter V
9. Developing rewards, page 4, chapter V
10. Starting objectives, page 1, 2, chapter VI
11. Folders and schedules page 2, 3, 4, chapter VI

For further information the best sources from the reference list are the books by Homme, Patterson, and Kohl. Homme and Patterson may be borrowed from IMCSE library and Kohl is available at any bookstore in paperback for $1.65.

A few final words--give the new idea enough time to take hold with your students. Don't give up too soon. Writing down your plans, your successes and failures will help you to gain insight into alternate approaches.

Good Luck!

APPENDIX XX

PRODUCT EVALUATION FORM

INSTRUCTIONAL MATERIALS CENTER

SPECIAL EDUCATION

1031 South Broadway--Suite 623
University of Southern California / A USOE Project
Los Angeles, California 90015 747-9308

Dear Teacher:

Thank you for your participation in the field testing of our media package Structuring the Classroom for Success. We would like to ask you to take a few more minutes of your time to answer some questions we have about how you used the package and your reaction to it.

The package will soon be available for general distribution and we hope that your comments will help us to make any necessary improvements in the package and to make suggestions to others about how to use the package in the most valuable way.

a) How did you use the package?

( ) In the sequence suggested
( ) In another sequence

What sequence:_____

( ) All at one time
( ) Over a period of a few days
( ) Over a period of a week or more

Comment:_____

Did you view it more than once?

( ) Yes ( ) No

Did you view it?

( ) Alone ( ) With one or two other people

( ) With a group of people

Comment:_____

How did you use the guidebook?

( ) Looked it over
( ) Read it once
( ) Read it & reread it

Comment:_____

Were there sections in the Guidebook in which the information was insufficient or unclear? (Please be specific).

Comments:_____

_____

_____

c) What ideas interested you enough to try them in your classroom?_____

_____

_____

_____

Did you try something new that was not specifically mentioned in the Guidebook? ( ) Yes ( ) No

Comments:_____

_____

_____

If you have implemented new ideas: How did you go about making changes?

Comments:_____

_____

_____

How would you describe the response of your students? Were there any changes in their behavior or attitudes?

Comments:_____

_____

_____

How would you rate your success?

( ) great, super, terrific
( ) almost there
( ) so-so
( ) didn't make it
( ) disaster

Comments:_____

_____

_____

If you ran into problems, what would have helped?

( ) more information
( ) a different approach on your part
( ) more support from people around you
( ) other_____

Comments:_____

_____

_____

Do you plan to continue the implementations you have made?

Comments:_____

_____

_____

Do you plan to implement any further ideas? ( ) Yes ( ) No

Comments:_____

_____

_____

Have other teachers you know (not involved with this evaluation project) shown an interest?

( ) in the package?
( ) in what you are doing in your classroom since you viewed the package?

Comments:_____

_____

_____

Are you working in a totally Special Education School? ( ) Yes ( ) No.

Do you have any other comments to make about the package and its usefulness to you?

Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name:_____

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